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- (1) be double-spaced throughout, including tables and figure captions;
- (2) include the scientific name at the first mention of each species;
- (3) include capitalized standard English names for all birds, but lower case for English names of other organisms;
- (4) use metric units for all measurements;
- (5) use the form "7 June 2003" for all dates;
- (6) use the 24-hour clock for all indications of time (e.g., 0800, 1400);
- (7) use the following abbreviations: s (second), min (minute), h (hour);
- (8) use active voice where at all possible.

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LONG-TERM TRENDS IN OSPREY (*Pandion haliaetus*) NESTING POPULATIONS ON LAKE ISTOKPOGA, FLORIDA

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Abstract.—Nesting Ospreys (*Pandion haliaetus*) were censused on Lake Istokpoga, Highlands County, Florida, from 1989 to 2012 to determine their abundance, distribution, and breeding status. A census conducted on the lake in 1910 recorded 75 occupied nests, however, only 9 nests were documented from a similar census conducted in 1973. The recent data, 190 nests (using only those data directly comparable to those of 1910 and 1973), suggest a dramatic recovery of this population greatly surpassing the early historic level. Nesting and foraging habitat availability at Lake Istokpoga has changed little since the early 1950s, thus a plausible explanation for the decline and subsequent increase in breeding Ospreys on Lake Istokpoga is the use of organochloride pesticides (DDT and Aldrin) beginning in the 1950s until their subsequent ban in the mid 1970s. Today, Lake Istokpoga supports one of the largest concentrations of nesting Ospreys in the world, and this may be related to the introduction of the submerged invasive aquatic macrophyte *Hydrilla*. While the decline and recovery of Osprey populations has been reported for many parts of the species range, it has not been reported from Florida. Ospreys continue to be used as an environmental indicator species.

There has been a general decline and recovery of Osprey (*Pandion haliaetus*) populations in various parts of the species' range. Decline has been related to eggshell thinning linked to the accumulation of organochloride pesticides (Ames 1966, Ratcliffe 1967, Hickey and Anderson 1968). Information on long-term trends in the Florida population during this period is limited. Most studies in Florida are relatively recent: Seahorse Key (Szaro 1978), Gainesville (Collopy

1984; Edwards and Collopy 1988; Edwards 1988, 1989 a, b), Sanibel Island (Westall 1983, Phillips et al. 1984), along the Withlacoochee River and at St. Marks National Wildlife Refuge (Reinman 1984), and at Florida Bay (Ogden 1978; Poole 1979, 1982; Kushlan and Bass 1983, Fleming et al. 1989, Bowman et al. 1989).

An exception is Lake Istokpoga, located along the eastern edge of the Lake Wales Ridge, in south-central Florida. Counts of nesting Ospreys conducted here in 1910 (unpublished journal of Donald J. Nicholson; cited in Howell 1932) and 1973 (James N. Layne, unpubl.) indicated a precipitous population decline. Ospreys were again surveyed on Lake Istokpoga from 1989 to 1990 in order to determine the present status of the breeding population on the lake, and censused from 1991 to 2012 to obtain data on reproductive success and establish a long-term data set.

Ospreys are an excellent indicator of environmental health:

- Diet is almost exclusively fish
- Live long lives and exhibit high nest fidelity
- Nests are visible
- Tolerate human disturbances
- Top level predator, tend to bioaccumulate

Sensitive to contaminants; considerable knowledge about contaminant-related effects especially chlorinated hydrocarbons and mercury pollutants

Information on historical and current population trends is presented. Speculation as to the cause of the population decrease from 1910-1973 is analyzed.

STUDY AREA AND METHODS

Lake Istokpoga (27° 22' N, 81° 17' W) is Florida's fifth-largest lake. It drains an area of 1,572 km² and has a surface area of 11,207 ha. The lake is shallow with an average depth of about 1.6 m. There are two primary influents: Josephine Creek, which carries water from over 30 Lake Wales Ridge lakes to the west, and Arbuckle Creek, which drains a large agricultural tract to the north (McDiffett 1978). There are also two small islands: Bumblebee Island (7.2 ha) located near the southern end of the lake and Big Island (40 ha) located near the center on the eastern side. More than half of the shoreline of the lake, and virtually all the shorelines of the two islands, are ringed with bald-cypress (*Taxodium distichum*). The remaining shoreline is bordered either by bayhead (swamp forests dominated by *Magnolia virginiana*, *Persea borbonia*, and *Gordonia lasionthus*), pine flatwoods, residential development, or fish camps. Residential areas and fish camps account for approximately 12 km (23%) of the shoreline. An ever-widening zone of open marsh, composed primarily of cattail (*Typha domingensis*), water hyacinth (*Eichhornia crassipes*), and water-lettuce (*Pistia striatiotes*), surrounds each island and borders most of the lakeshore. The relatively recent invasion of marsh vegetation presumably began when the C-41A canal and the S-68 water control structures permanently reduced the maximum

annual water fluctuation of the lake from 2.1 m to 0.6 m (Florida Fish & Wildlife Conservation Commission, Lake Restoration Section). Hydrilla (*Hydrilla verticillata*), an introduced submerged weed, has been rapidly expanding since its introduction into Lake Istokpoga in 1979. In 1996 for example, hydrilla coverage was estimated at 10,366 ha (FFWCC, Lake Restoration Section).

A survey is defined as a sampling method designed to produce an estimate. A census is defined as an exhaustive count of actual numbers. In 1989 and 1990, Osprey nests were surveyed in late March or early April, one or two days each year. Beginning in 1991 and continuing through 2012, Osprey nests were censused 8-13 times per year between January and June. The entire shorelines (51.5 km) of the lake and the two islands were censused by boat and the location of each nest was plotted on aerial photographs. Most nests were easily observed from the boat, and binoculars and spotting scopes were used to determine nesting status. These techniques replicate the methods of Nicholson (1910) and Layne (1973). Nests not located on the shoreline (i.e., not visible from the water) were not censused until 1995. Although these nests ($n=100$) are associated with Lake Istokpoga, they are not included in this paper because nests in these locations would not have been censused by Nicholson or Layne.

The terms used here for describing nest activity are based on Postupalsky (1977) as modified by Bowman et al. (1989). An "occupied nest" was a nest with one or two adults on or near a completed nest; an "active nest" was one containing an adult in the incubation posture. Official nesting status was recorded only after the above criteria were met on two occasions at least seven days apart. Nicholson (1910) did not differentiate between active and occupied nests, therefore Nicholson's data as presented in this paper represent the combination of active and occupied nests.

RESULTS

The Ospreys of Lake Istokpoga were first censused in (10 March-18 April) 1910 by D. J. Nicholson who recorded 75 occupied nests along the shoreline and the two interior islands (Howell 1932; pers. exam. of unpublished journal). In 1973 (11 May), J. N. Layne (unpublished data) with the assistance of C. E. Winegarner censused Osprey nests along the entire shorelines of the lake and islands and found only 9 occupied nests and a total of 22 Ospreys. The data from 1989-2012, 200 active plus occupied nests, reveal that the population has increased dramatically since 1973 and is now much higher than the level reported by Nicholson (Fig. 1).

Osprey nests were often located near one another (ca. 10 m apart) in the 1989-2012 censuses. Densities are highest along the southern, northeastern, and eastern shorelines. Nests on the northeastern shoreline are often located in residential areas near houses while the southern shoreline offers more pristine habitat. Analysis of a subset of data from 1995-2000 reveals that the number of nests observed from mid-March to mid-April in any given year (coinciding with Nicholson's 1910 trip) average 98% of the number of nests observed over the entire field season. From 1995-2000 the number of nests visible by boat (occupied + active) in March/April increased from 104 to 178 nests.

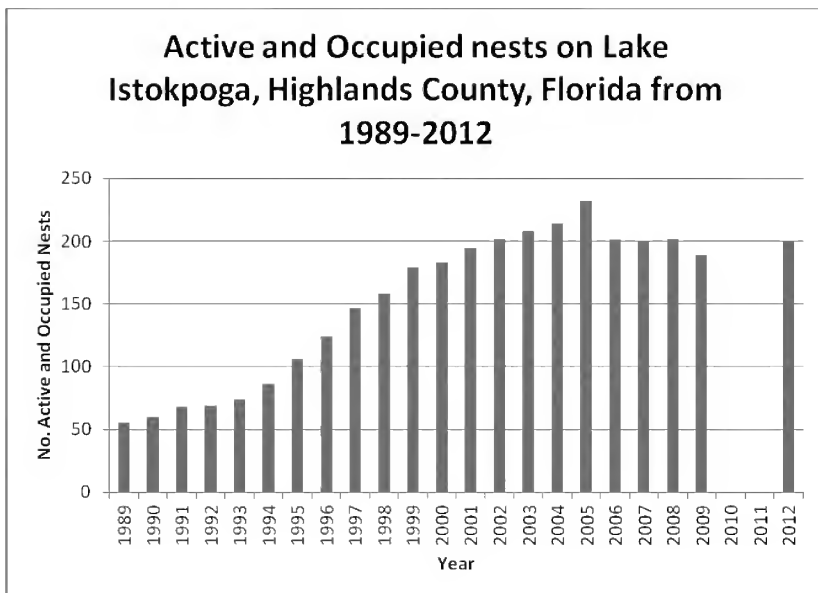


Figure 1. The number of active and occupied nests is displayed by year. For comparison to the Nicholson and Layne surveys, only nests visible by boat are included in these numbers. The additional 100+ active and occupied nests located in 2012 are excluded from this graph.

DISCUSSION

Ogden (1978) speculated that the decline in the number of nesting Ospreys on Lake Istokpoga from 1910 to 1973 was most likely caused by habitat loss. Although a large wooded swamp probably containing some bald-cypress trees, located near the southeastern shore of the lake, and an area around Istokpoga Creek were harvested from the 1940s to the early 1960s to increase agricultural acreage (USDA aerial photos 1940, 1944, 1953), a buffer zone of bald cypress along the lakeshore remains. Cypress trees, which today support the uncommonly large number of Osprey nests, were present as suitable nest sites in the late 1960s and early 1970s when population estimates were low (Glen Tope, J. N. Layne pers. comm.). Therefore, it is unlikely that the low Osprey population of 1973 reflected a lack of suitable nest sites.

Other explanations have been suggested. One of these revolves around permanently altered water levels, resulting from the construction of the C-41A canal and S-68 water control structure in 1962. The persistent annual altered water levels have resulted in the expansion of aquatic vegetation lake-ward, increased vegetation density,

and the formation of floating tussocks. As this vegetated marsh zone expands, less foraging area is available to the Ospreys. The expanding marsh zone is a relatively recent change in the ecological structure of Lake Istokpoga. Additionally, vegetation coverage has increased since the 1973 census by Layne. Therefore, it is unlikely the dramatic decline of Ospreys observed from 1910-1973 at Lake Istokpoga can be attributed to habitat loss.

The most likely cause for the Osprey population decline is the local use of pesticides in the 1950s, 60s and early 70s. During this period, aldrin and toxaphene were used on farms located along the shoreline and most of the Lake Istokpoga watershed (Glen Tope, pers. comm.). Although the effects of aldrin and its main metabolite, dieldrin (four times more toxic than DDT, Milleson 1980) are not fully understood, it has been linked to decreased reproductive success of inland aquatic birds (Faber and Hickey 1973). DDT was sprayed extensively from 1966-1970 in Highlands County, including the Lake Istokpoga drainage area, under a federal program to eliminate the yellow-fever mosquito (*Aedes aegypti*; Dr. Jai Nayars, pers. com.). In 1976, South Florida Water Management District personnel found traces of DDE, the main metabolite of DDT, in sediment samples taken from Lake Istokpoga (Pheuffer 1985). DDT and DDE have been shown to cause lowered reproductive success in Ospreys (Poole 1989). Organochlorines bioaccumulate and reach their highest concentrations among top predators such as the Osprey (Woodwell 1967, Newton 1979). Although Florida ranked lowest of five states tested for DDE, dieldrin, and PCBs (Blus et al. 1977), eggshell thinning in Ospreys has been reported from two locations in Florida (Anderson and Hickey 1972, Szaro 1978). While current evidence is circumstantial (eggshell thickness between 1910 and 1995-1999 are comparable; no data are available from the 1960s-1980s), documentation of the effects of DDT and DDE on higher food-chain organisms suggests dramatic population declines when these chemicals occur in the system. In Florida, DDT/DDE may have adversely affected more than 20 species of birds including Ospreys (Stevenson and Anderson 1994).

I suggest that the most likely cause for the dramatic increase in Osprey numbers on Lake Istokpoga, well beyond historic numbers, began with the accidental introduction of hydrilla in 1979. Hydrilla greatly expanded the littoral-zone of Lake Istokpoga and provided increased structural complexity. Structural complexity of the habitat often reduces predatory efficiency by reducing prey capture rates (Crowder and Cooper 1982) and provides important nursery areas for the fish assemblage (Conrow et al. 1990). While studying macrophytes in Lake Okeechobee, Florida, Chick and McIvor (1994) found the highest density and biomass of fish in hydrilla. The idea that macrophytes can

have a profound effect on fish populations is a widely recognized (Cook and Bergersen 1988, Hinch and Collins 1993, Hosn and Downing 1994, Lyons 1989, Lundvall et al. 1999).

Increases in the structural complexity and fish nursery areas may allow the fish population, at least for some species, to grow beyond natural levels. Artificially high fish populations could explain the rapidly increasing Osprey population. Hydrilla would naturally expand to cover the entire lake; however the State of Florida's aquatic weed control program treated a portion of the lake approximately once every three years. For many years the herbicide Fluridone (SONAR[®]) was the chemical of choice. The Fluridone treatment continually represses succession and prevents topped-out hydrilla (huge floating mats which block out all sunlight) from destroying native habitats. More recently, the aquatic weed-control program was forced to change herbicides as hydrilla became resistant to Fluridone. The current herbicide of choice is Aquathol-K and spraying can occur annually.

While increased nutrient loading may account for alterations to fish numbers, growth rates, and species composition, the effects of nutrient loading on fish is unpredictable and may be short-lived (Hasler 1947, Colby et al. 1972, Hayward and Margraf 1987, Carpenter et al. 1998, Turner et al. 1999).

There was a general decline and recovery of Ospreys nesting on Lake Istokpoga. I have presented information on the most probable cause of decline (DDT) and attempted to present plausible alternatives to the hypothesis that habitat loss was the culprit. A hypothesis was developed to help explain the increase in Osprey numbers, well beyond historical values. Despite the cause of decline, today (2012) Lake Istokpoga supports one of the largest concentrations of post-DDT nesting Ospreys in the world with 200 nesting pairs (>300 including all nests associated with Lake Istokpoga; shoreline, islands, and nests not visible by boat and therefore not censused by Nicholson or Layne). Nests are clustered along the southern, northeastern and eastern shorelines and are often found within 10-15 m of each other. The cluster of northeastern nests is located within a residential area. Surprisingly, the two interior islands are nearly devoid of nesting Ospreys. Nicholson recorded at least 20 Osprey nests on the two interior islands in 1910.

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LITERATURE CITED

- AMES, P. L. 1966. DDT residues in the eggs of the Ospreys in the northeastern United States and their relation to nesting success. *Journal of Applied Ecology* 3:87-97.
- ANDERSON, D. W., AND J. J. HICKEY. 1972. Eggshell changes in certain North American birds. Pages 514-540 in *Proceedings of the 15th International Ornithological Congress*.
- BENT, A. C. 1938. *Life Histories of North American Birds of Prey: Order Falconiformes Part 1*. U.S. National Museum Bulletin 167.
- BLUS, L. J., S. N. WIEMEYER, J. A. KERWIN, R. C. STENDALL, H. M. OHLENDORF, AND L. F. STICKEL. 1977. Impact of estuarine pollution on birds. Pages 56-71 in *Estuarine Pollution Control and Assessment, Proceedings of a Conference*. U.S. Environmental Protection Agency, Washington, D.C.
- BOWMAN, R., G. V. N. POWELL, J. A. HOVIS, N. C. KLINE, AND T. WILMERS. 1989. Variations in reproductive success between subpopulations of the Osprey (*Pandion haliaetus*) in south Florida. *Bulletin of Marine Science* 44:245-250.
- CARPENTER, S. R., N. F. CARACO, D. L. CORRELL, R. W. HOWARTH, A. N. SHARPLEY, AND V. H. SMITH. 1998. Nonpoint pollution of surface waters with phosphorus and nitrogen. *Ecological Applications* 8:559-568.
- CHICK, J. H., AND C. C. McIVOR. 1994. Patterns in abundance and composition of fishes among beds of different macrophytes: viewing a littoral zone as a landscape. *Canadian Journal of Fisheries and Aquatic Sciences* 51:2873-2882.
- COLBY, P. J., G. R. SPANGLER, D. A. HURLEY, AND A. M. McCOMBIE. 1972. Effects of eutrophication on salmonid communities in oligotrophic lakes. *Journal of the Fisheries Research Board of Canada* 29:975-983.
- COLLOPY, M. W. 1984. Parental care, productivity and predator-prey relationships of Ospreys in three north Florida lakes; preliminary report. Pages 85-98 in *Proceedings of the Southeastern U.S. and Caribbean Osprey Symposium* (M. Westall, Ed.). The International Osprey Foundation, Sanibel Island.
- CONROW, R., A. V. ZALE, AND R. W. GREGORY. 1990. Distributions and abundances of early life stages of fishes in a Florida lake dominated by aquatic macrophytes. *Transactions of the American Fisheries Society* 119:521-528.
- COOK, M. F., AND E. P. BERGERSEN. 1988. Movements, habitat selection, and activity periods of northern pike in Eleven Mile Reservoir, Colorado. *Transactions of the American Fisheries Society* 117:495-502.
- EDWARDS, T. C., JR. 1988. Temporal variation in prey preference patterns of adult Ospreys. *Auk* 105:244-251.
- EDWARDS, T. C., JR. 1989a. The ontogeny of diet selection in fledgling Ospreys. *Ecology* 70:881-896.
- EDWARDS, T. C., JR. 1989b. Similarity in the development of foraging mechanics among sibling Ospreys. *Condor* 91:30-36.
- EDWARDS, T. C., JR., AND M. W. COLLOPY. 1988. Nest tree preference of Ospreys in north-central Florida. *Journal of Wildlife Management* 52:103-107.

- FABER, R. A., AND J. J. HICKEY. 1973. Eggshell thinning, chlorinated hydrocarbons, and mercury in inland aquatic bird eggs, 1969 and 1970. *Pesticide Monitoring Journal* 7:27-36.
- FLEMING, D. M., N. C. KLINE, AND W. B. ROBERTSON, JR. 1989. A comparison of Osprey nesting distribution, abundance and success in Florida Bay from 1968-1984. (Abstract) *Bulletin of Marine Science* 44:519.
- HASLER, A. D. 1947. Eutrophication of lakes by domestic drainage. *Ecology* 28:383-395.
- HAYWARD, R. S., AND F. J. MARGRAF. 1987. Eutrophication effects on prey size and food available to yellow perch in Lake Erie. *Transactions of the American Fisheries Society* 116:210-223.
- HICKEY, J. J., AND D. W. ANDERSON. 1968. Chlorinated hydrocarbons and eggshell changes in raptorial and fish-eating birds. *Science* 162:271-273.
- HINCH, S. G., AND N. C. COLLINS. 1993. Relationships of littoral fish abundance to water chemistry and macrophyte variables in central Ontario lakes. *Canadian Journal of Fisheries and Aquatic Sciences* 50:1870-1878.
- HOSN, W. A., AND J. A. DOWNING. 1994. Influence of cover on the spatial distribution of littoral-zone fishes. *Canadian Journal of Fisheries and Aquatic Sciences* 51:1832-1838.
- HOWELL, A. H. 1932. *Florida Bird Life*. Coward-McCann, New York.
- KUSHLAN, J. A., AND O. L. BASS, JR. 1983. Decreases in the southern Florida Osprey population, a possible result of food stress. Pages 187-200 *in* *Biology and Management of Bald Eagles and Ospreys* (D. M. Bird, Ed.). Harpell Press, Ste-Anne-de-Bellevue, Quebec.
- LUNDVALL, D., R. SVANBACK, L. PERSSON, AND P. BYSTROM. 1999. Size-dependent predation in piscivores: interactions between predator foraging and prey avoidance abilities. *Canadian Journal of Fisheries and Aquatic Sciences* 56:1285-1292.
- LYONS, J. 1989. Changes in the abundance of small littoral-zone fishes in Lake Mendota, Wisconsin. *Canadian Journal of Zoology* 67:2910-2916.
- MCDIFFETT, W. F. 1978. Limnological characteristics of eutrophic Lake Istokpoga, Florida. Department of Biology, Bucknell University, Lewisburg, Pennsylvania.
- MILLESON, J. F. 1980. Chlorinated hydrocarbon pesticide residues in freshwater fishes within the South Florida Water Management District. South Florida Water Management District Technical Report 3-80.
- NEWTON, I. 1979. *Population Ecology of Raptors*. Buteo Books, Vermillion, South Dakota.
- ODGEN, J. 1978. Osprey. Pages 30-32 *in* *Rare and Endangered Biota of Florida*. Vol. 2, *Birds* (H. W. Kale, II., Ed.). University Presses of Florida, Gainesville.
- PHEUFFER, R. J. 1985. Pesticide residue monitoring in sediment and surface water bodies within the South Florida Water Management District. South Florida Water Management District Technical Publication 85-02.
- PHILLIPS, S. R., M. A. WESTALL, AND P. W. ZAJICEK. 1984. The winter of 1983: poor productivity for Ospreys on Sanibel Island, Florida. Pages 61-66 *in* *Proceedings of the Southeastern U.S. and Caribbean Osprey Symposium*. (M.A. Westall, Ed.). The International Osprey Foundation, Sanibel Island.
- POOLE, A. F. 1979. Sibling aggression among nestling Ospreys in Florida Bay. *Auk* 96:415-417.
- POOLE, A. F. 1982. Brood reduction in temperate and sub-tropical Ospreys. *Oecologia* 53:111-119.
- POOLE, A. F. 1989. *Ospreys: A Natural and Unnatural history*. Cambridge University Press, New York, New York.
- POSTUPALSKY, S. 1977. A critical review of problems in calculating Osprey reproductive success. Pages 1-12 *in* *Transactions of the North American Osprey Research Conference* (J. C. Ogden, Ed.). USDI National Park Service, Transactions and Proceedings Series No. 2, Washington, D.C.

- RATCLIFFE, D. A. 1967. Decrease in eggshell weight in certain birds of prey. *Nature* 215:208-210.
- REINMAN, J. P. 1984. The status of Osprey populations of the central and northern Gulf coasts of Florida. Pages 109-117 in *Proceedings of the Southeastern U.S. and Caribbean Osprey Symposium* (M. A. Westall, Ed.). The International Osprey Foundation, Sanibel Island.
- STEVENSON, H. M., AND B. H. ANDERSON. 1994. *The Birdlife of Florida*. The University Press of Florida Gainesville.
- SZARO, R. C. 1978. Reproductive success and foraging behavior of the Osprey at Seahorse Key, Florida. *Wilson Bulletin* 90:112-118.
- TURNER, A. M., J. C. TREXLER, C. F. JORDAN, S. J. SLACK, P. GEDDES, J. H. CHICK, AND W. F. LOFTUS. 1999. Targeting ecosystem features for conservation: standing crops in the Florida Everglades. *Conservation Biology* 13:898-911.
- WESTALL, M. A. 1983. An Osprey population aided by nest structures on Sanibel Island, Florida. Pages 267-272 in *Biology and Management of Bald Eagles and Ospreys* (D. M. Bird, Ed.). Harpell Press, Ste-Anne-de-Bellevue, Quebec.
- WOODWELL, G. M. 1967. Toxic substances and ecological cycles. *Scientific American* 216:24-31.

**LAUGHING GULLS (*Leucophaeus atricilla*) APPEAR TO “TREAD”
FOR TINY CRUSTACEANS IN SARGASSUM WEED (*Sargassum*
sp.) WASHED ASHORE FROM THE GULF OF MEXICO**

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Laughing Gulls (*Leucophaeus atricilla*) forage opportunistically along beaches, bays, and mudflats and in waste dumps, pastures, shopping malls, golf courses, and lawns. They feed on garbage, steal from other seabirds, cadge handouts from people, and even capture flying insects (Burger 1996). This adaptability carries over to the marine organisms that constitute their principal foods, which vary from fishes too large to be swallowed and must be picked apart to barely visible eggs, developing embryos, and minute interstitial invertebrates buried under several centimeters of intertidal sand. That they might also consume tiny crustaceans resident in seaweeds that float ashore has not, to my knowledge, been reported, nor is their apparent method of obtaining them ordinary.

On 14 August 2012 at 15:45, while walking the beach at Longboat Key on Florida's southwest coast, I noticed two Laughing Gulls in the low swash performing an unusual maneuver. They were stepping in place on small clumps of sargassum weed (*Sargassum* sp.) roughly 20 cm in diameter, as if treading wine grapes. The speed of their steps was moderate, slower than a Laughing Gull runs but faster than it walks. Periodically a gull lowered its head between its feet or beside one foot and seemed to pick up something in its beak. It then lifted its head and appeared to swallow. If the gull was indeed recovering objects, they were small. Both gulls were in adult plumage. They were widely separated, and any attempt to quantify the frequencies of this putative foraging behavior would have been inconclusive.

Several days of onshore winds had left thick windrows of sargassum weed in the beach wrack. Much of the seaweed deposited at the high-tide line was in a state of brown decay, but the clumps now washing ashore were alive, still turgid and supple. They were also populated by small crustaceans.

Earlier that day I had shaken clusters over my open palm and recovered several amphipods and natantian shrimps. I fixed the shrimps in 5% formalin-seawater and examined them under a dissecting microscope at low power. Some were transparent; others contained chromatophores matching the dull yellow of the living seaweed. Prominent were *Hippolyte nicholsoni* and *Periclimenes* sp., this last a member of the protean *P. iridescens* complex (Holthuis 1951, Lebour 1949). All these shrimps occupy diverse benthic habitats and are common commensals of seagrasses, seaweeds, octocorallians, and other sessile organisms in shallow waters of coastal Florida and the Caribbean Sea (Chace 1972; Heard and Spotte 1991, 1997; Spotte and Bubucis 1996; Spotte et al. 1995), often washing ashore still clinging to the host organism after it detaches from the substratum. In contrast, at least two species of *Sargassum* (*S. fluitans* and *S. natans*) are holopelagic and never attached. The shrimps I recovered were adults (several carried embryos under their abdomens) with carapace lengths of ~2.0-4.5 mm as measured from tip of the rostrum to posterior end of the carapace. They were easily seen with the unaided human eye, making them visible to a gull's eye too.

Crustaceans such as these, small and available only intermittently, are probably of little importance to a hungry gull, although perhaps attractive to satiated gulls simply loafing on the beach with no apparent urgency to forage, as these two appeared to be. This conjecture is based on two observations: the two birds I watched seemed disinclined to investigate

other clumps of seaweed nearby, and no other Laughing Gulls I observed that day behaved as these did. Still, foraging on tiny shrimps is reasonable considering that Laughing Gulls eat other small items, including the eggs of horseshoe crabs (*Limulus polyphemus*), which measure 2-3 mm diameter (see below). To seabirds like the Lesser Sheathbill (*Chionis minor*) that inhabit colder, more productive waters, the small crustaceans associated with exposed seaweeds are important dietary items (Huyser et al. 2000), although I found no reports that sheathbills employ similar “treading” behavior to obtain them.

At the time of my observation the surf zone was filled with sandpipers of various species foraging busily in the wet sand. A few Ring-billed Gulls (*Larus delawarensis*) stood among them. None except the laughing gulls showed any interest in the numerous clumps of vegetation drifting around their legs. The small size and cryptic coloration of the shrimps, combined with the sargassum weed’s complex branching, could have made their detection difficult. “Treading” perhaps stimulated them to move and reveal their locations.

Sullivan (1984: 710) wrote of Laughing Gulls, “They uncover the eggs [of horseshoe crabs] by treading with both feet at the water’s edge and then scooping up the eggs which float to the surface.” Buckley (1966: 395) reported treading behavior in the shallows (which he called “paddling”) by Bonaparte’s Gulls (*Chroicocephalus philadelphia*), Ring-billed Gulls, a California Gull (*Larus californicus*), and Laughing Gulls, noting that Bonaparte’s Gulls “agitated the water rapidly with their feet, by a deliberate up-and-down motion, the entire leg moving as if the bird were trying to slowly and deliberately mash something into the ground.” He added that such movements had been reported in the literature and variously called dancing, foot-paddling, foot-patting, paddling, puddling, pumping, stamping, thumping, tramping, trampling, treading, and trembling.

Not every observer considers these terms synonyms; still others imply they might differ in unspecified ways or dismiss descriptions entirely. Burger (1988) mentioned “foot paddling” behavior in reference to Laughing Gulls, although without a definition. She omitted its use in foraging (p. 13, Table 3), but included it on the following page (p. 14, Table 4). Burger (1996: 6), citing Sullivan (1984), stated that the male Laughing Gull “foot paddles” to dislodge horseshoe crab eggs from the substratum, again without an accompanying description. Sullivan, however, specifically reported what she saw as “treading,” implying a stepping motion in shallow water similar to what Buckley and I witnessed. However, in no instance did Buckley see a bird dip its head downward and appear to pick up an object, and he was unable to associate the behavior with ingestion.

Gulls in flight occasionally “paw” or “pat” surface objects, although those movements are not what I saw. Audubon was aboard a vessel in Galveston Bay on 4 May 1837 when he watched Laughing Gulls feed on drifting garbage, writing (Audubon and MacGillivray 1838: 127): “These, as well as all other Gulls, pat the water with their feet, their legs being partially extended, whilst assisting themselves with the bill to pick up any floating food.” The Laughing Gulls Audubon observed were evidently hovering just above the surface, not afloat or standing on the shore.

Floating phalaropes foot-paddle to stir the substratum (e.g., Michael 1938, DiGiacomo et al. 2002), relying afterward on the surface tension of water to ratchet up suspended prey while rapidly “tweezing” the beak (Prakash et al. 2008). Plovers use what has been termed “foot-patting” when foraging on loose sand or mud to chase small animals to the surface (Matthews and Schwan 1994), and Audubon and MacGillivray (1835: 624) wrote of American Golden-Plovers (*Pluvialis dominica*), “They are frequently observed to pat the moist earth with their feet, to force worms from their burrows.” Such movements are analogous to the “treading” I saw, although applied on land and in a different context.

My report of presumed motive-directed “treading” is inferential even if correct. Observations of foraging based solely on behavior (e.g. Burger 1987, 1988) can be incomplete and therefore inconclusive, as this one is. For example, confirmation of a behavior-foraging association when the prey is invisible at a distance to human observers requires examining the gut contents of a random sample of gulls to assure ingestion, identifying

food items and their fragments to species, and comparing the results with densities and distributions of the same organisms taken from the habitat.

LITERATURE CITED

- AUDUBON, J. J., AND W. MACGILLIVRAY. 1835. Ornithological Biography, Vol. III. Adam & Charles Black, Edinburgh.
- AUDUBON, J. J., AND W. MAC GILLIVRAY. 1838. Ornithological Biography, Vol. IV. Adam & Charles Black, Edinburgh.
- BUCKLEY, P. A. 1966. Foot-paddling in four American gulls, with comments on its possible function and stimulation. *Zeitschrift für Tierpsychologie* 23:395-402.
- BURGER, J. 1987. Foraging efficiency in gulls: a congeneric comparison of age differences in efficiency and age of maturity. *Studies in Avian Biology* 10:83-90.
- BURGER, J. 1988. Foraging behavior in gulls: differences in method, prey, and habitat. *Colonial Waterbirds* 11:9-23.
- BURGER, J. 1996. Laughing Gull (*Larus atricilla*). In *The Birds of North America*, No. 25 (A. Poole and F. Gill, Eds.). The Academy of Natural Sciences, Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C.
- CHACE, F. A., JR. 1972. The shrimps of the Smithsonian-Bredin Caribbean expeditions with a summary of the West Indian shallow-water species (Crustacea: Decapoda: Natantia). *Smithsonian Contributions in Zoology* No. 98.
- DIGIACOMO, P. M., W. M. HAMNER, P. P. HAMNER, AND R. M. A. CALDEIRA. 2002. Phalaropes feeding at a coastal front in Santa Monica Bay, California. *Journal of Marine Systems* 37:199-212.
- HEARD, R. W., AND S. SPOTTE. 1991. Pontoniine shrimps (Decapoda: Caridea: Palaemonidae) of the northwest Atlantic. II. *Periclimenes patae*, new species, a gorgonian associate from shallow reef areas off the Turks and Caicos Islands and Florida Keys. *Proceedings of the Biological Society of Washington* 104:40-48.
- HEARD, R. W., AND S. SPOTTE. 1997. Pontoniine shrimps (Decapoda: Caridea: Palaemonidae) of the northwest Atlantic. V. *Periclimenes mclellandi*, new species, a gorgonian associate from Pine Cay, Turks and Caicos Islands, British West Indies. *Proceedings of the Biological Society of Washington* 110:39-48.
- HOLTHUIS, L. B. 1951. A general revision of the Palaemonidae (Crustacea: Decapoda: Natantia) of the Americas. I. The subfamilies Euryrhynchinae and Pontoniinae. *Occasional Papers of the Allan Hancock Foundation*, Publication 11.
- HUYSER, O., P. G. RYAN, AND J. COOPER. 2000. Changes in population size, habitat use and breeding biology of lesser sheathbills (*Chionis minor*) at Marion Island: impacts of cats, mice and climate change? *Conservation Biology* 92:299-310.
- LEBOUR, M. V. 1949. Some new decapod Crustacea from Bermuda. *Proceedings of the Zoological Society of London* 11(Part IV):1107-1117.
- MATTHEWS, S., AND M. SCHWAN. 1994. Plovers. *Alaska Department of Fish and Game*, Juneau, 1 p.
- MICHAEL, C. W. 1938. Behavior of northern phalaropes. *Condor* 40:85.
- PRAKASH, M., D. QUÉRÉ, AND J. W. M. BUSH. 2008. Surface tension transport of prey by feeding shorebirds: the capillary ratchet. *Science* 320:931-934.
- SPOTTE, S., AND P. M. BUBUCIS. 1996. Diversity and abundance of caridean shrimps associated with the slimy sea plume *Pseudopteroergorgia americana* at Pine Cay, Turks and Caicos Islands, British West Indies. *Marine Ecology Progress Series* 133:299-302.
- SPOTTE, S., P. M. BUBUCIS, AND R. M. OVERSTREET. 1995. Caridean shrimps associated with the slimy sea plume (*Pseudopteroergorgia americana*) in midsummer at Guana Island, British Virgin Islands, West Indies. *Journal of Crustacean Biology* 15:291-300.
- SULLIVAN, K. A. 1984. Cooperative foraging in the Laughing Gull. *Wilson Bulletin* 96:710-711.

FIRST WINTER RECORDS IN FLORIDA OF YELLOW-BELLIED FLYCATCHER (*Empidonax flaviventris*) AND SCARLET TANAGER (*Piranga olivacea*)

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We recently provided details on the first or first recent winter records of five species of Neotropical migrants in Florida, and summarized seven other species described during winter since 1994 (Pranty and Ponzo 2012). We also mentioned three other species for which we believed that recent winter records had yet to be formally described: the Chimney Swift (*Chaetura pelagica*), Yellow-bellied Flycatcher (*Empidonax flaviventris*), and Scarlet Tanager (*Piranga olivacea*).

Contrary to our earlier paper (Pranty and Ponzo 2012), the history of the somewhat confusing Chimney Swift record was published by Anderson (1996) and Kratter et al. (2002), so we merely summarize the history here. A hatching-year male swift that was found alive at the University of Florida campus, Gainesville, Alachua County by Richard Bucholz died three hours later. The specimen, UF 38060, was made into a study skin and partial skeleton (Kratter et al. 2002). The specimen tag bears the date of “31” November 1993; Bucholz “put down 31 November instead of realizing it was 1 December” because he “never knew how many days were in each month” but was certain that “it was November/December rather than October/November” (Anderson 1996:125). Tom Webber (in litt., Oct 2012) relayed a similar story to us. Thus the date of this specimen was determined to be 1 December 1993 (Anderson 1996, Kratter et al. 2002). We have archived five photographs of the Chimney Swift specimen taken by Andy Kratter (BPA 3353a-e).

The other two species that we mentioned, the Yellow-bellied Flycatcher and Scarlet Tanager, are described in detail for the first time here. As with our previous paper, BPA catalog numbers refer to the Pranty archive.

Yellow-bellied Flycatcher: one discovered at Delray Beach, Palm Beach County, on 4 January 1994 was audio-recorded on 24 January 1994 by Brian Hope and accepted by the Florida Ornithological Society Records Committee (FOSRC; 95-341; Anderson 1996). The Florida Ornithological Society Field Observations Committee report (Pranty 1994) gives the final date of occurrence as 11 April 1994, but Anderson (1996) states that the correct date was 4 April 1994. The flycatcher wintered in Hope’s neighborhood, which includes a golf course, vegetated by Brazilian pepper (*Schinus terebinthifolius*) and other dense shrubs. The flycatcher typically perched low in vegetation, usually 0.3-1.0 m above ground, but occasionally foraged as much as 4.5-6 m above ground (B. Hope pers. comm.). No photographs were taken, but three minutes of vocalizations were recorded. The Yellow-bellied Flycatcher was heard giving two calls, a bi-syllabic call reminiscent of a Killdeer (*Charadrius vociferus*) and a single-noted call uttered when the flycatcher was foraging. Many calls of each type are audible on the audiotape submitted to FOSRC, which is now a digital audio file (BPA 823).

Yellow-bellied Flycatchers are very rare to uncommon transient migrants throughout, occurring mostly during fall (Stevenson and Anderson 1994, Greenlaw et al. in review). A few winter reports, perhaps mostly on Christmas Bird Counts (Stevenson and Anderson 1994) are known, but the Palm Beach County flycatcher audio-recorded by Brian Hope furnishes the only verifiable record during this season (Anderson 1996, Greenlaw et al. in review).

Scarlet Tanager: one in basic plumage, evidently a hatch-year male (Fig. 1), discovered at Ascend Performance Materials (formerly Monsanto) property, Cantonment, Escambia County on 28 December 2011 by Bob & Lucy Duncan and others (Pranty 2012). Two photographs (BPA 2048a-b) taken by Larry Goodman have been archived, one showing the tanager perched and the other with its wings raised. The bird was found in an isolated vine-covered tree among storage tanks and piping on the grounds of a chemical plant. Photographs show a medium-sized passerine with an overall dull yellow-green plumage and blackish wings. The head is uniformly yellow green with a large black eye. The pale brownish bill is rather short and thick with a small “tooth” midway along the bottom of the maxilla. The back and rump are also yellow-green. The wings are unmarked except for three short, yellowish-tipped olive feathers on the tips of the median coverts; the scapulars are blackish with paler remiges. The tail, visible from only the side, appears to be olive. The underparts, including the undertail coverts, are mostly pale yellow, with a whitish patch along the flanks. The underwing coverts are whitish with slightly darker remiges. The legs and feet are gray.



Figure 1. Basic-plumaged Scarlet Tanager at Ascend Performance Materials property, Cantonment, Escambia County. This photograph documents the first record of this species in Florida during winter. Photograph by Larry Goodman, 28 December 2011.

Scarlet Tanagers are rare to uncommon transient migrants throughout (Stevenson and Anderson 1994, Greenlaw et al. in review). Stevenson and Anderson (1994) list 17 localities in Florida with winters reports, but none was known to be verifiable. Thus, the Escambia County tanager (Fig. 1) represents the first winter record for state (Greenlaw et al. in review).

Probably largely result of the Internet, first-winter records in Florida of Neotropical migrants continue to accumulate. In addition to the four first-winter records described by us (Pranty and Ponzo 2012), the seven records that preceded that note, and the two species detailed here, two additional species of Neotropical migrants have been recorded during recent winters and await formal description: Wilson's Phalarope at Lake Apopka North Shore Restoration Area, Orange County and Warbling Vireo at Miami, Miami-Dade County.

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LITERATURE CITED

- ANDERSON, B. H. 1996. Twelfth report of the Florida Ornithological Society Records Committee: 1994 & 1995. *Florida Field Naturalist* 24:122-134.
- GREENLAW, J. S., B. PRANTY, AND R. BOWMAN. In press. The Robertson and Woolfenden Florida Bird Species: An Annotated List. Special Publication No. 8, Florida Ornithological Society, Gainesville.
- KRATTER, A. W., T. WEBBER, T. TAYLOR, AND D. W. STEADMAN. 2002. New specimen-based records of Florida birds. *Bulletin of the Florida Museum of Natural History* 43:111-161.
- PRANTY, B. 1994. Field Observations Committee spring report: March-May 1994. *Florida Field Naturalist* 22:118-126.
- PRANTY, B. 2012. Field Observations Committee winter report: December 2011-February 2012. *Florida Field Naturalist* 40:101-112.
- PRANTY, B., AND V. PONZO. 2012. First winter records in Florida of Common Nighthawk (*Chordeiles minor*), Cliff Swallow (*Petrochelidon pyrrhonota*), Red-eyed Vireo (*Vireo olivaceus*), and Bobolink (*Dolichonyx oryzivorus*), and first recent winter record of Mississippi Kite (*Ictinia mississippiensis*). *Florida Field Naturalist* 40:41-46.
- STEVENSON, H. M., AND B. H. ANDERSON. 1994. *The Birdlife of Florida*. University Press of Florida, Gainesville.

**AMERICAN ALLIGATOR (*Alligator mississippiensis*) PREDATION
ON A FORAGING GREEN HERON (*Butorides virescens*)**

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On 21 August 2011 at approximately 1930 h, I observed a juvenile Green Heron (*Butorides virescens*) foraging on a mud flat during low tide in a brackish marsh. The marsh where this event was observed is called Round Marsh located in the Theodore Roosevelt area of the Timucuan Ecological & Historic Preserve, Jacksonville, Florida. The Preserve is a unit of the National Park Service and is also associated with the Fort Caroline National Memorial approximately 6 km away on the St. Johns River and about 8 km from the Atlantic Ocean.

The Green Heron was stalked and eventually preyed upon by an (*Alligator mississippiensis*) estimated to be 2 m in total length. The alligator stalked the bird for almost 20 minutes in a deep pool adjacent to the mud flat while the bird was foraging. During my observation, the feeding behavior of the heron included crouched standing and waiting behavior, foot stirring, and what appeared to be the baiting behavior whereby insects were dropped in the water as bait for small fish as described in the literature (Holt 1961; Meyerriecks 1966, 1971; Davis and Kushlan 1976; Kushlan 1994; Hancock 1999). The bird appeared to drop an insect into the water between the edge of the mud flat and the deeper pool where the alligator was located. The heron's attention seemed to be on some fish when the alligator struck and captured the bird in its jaws and swallowed the bird whole. The alligator then submerged briefly but did not perform any of the characteristic spins in the water, but rather moved off into the one of the channels of the marsh.

Birds are relatively unimportant food for American alligators (Wolf et al. 1987). Delany and Abercrombie (1986) reported that in north-central Florida the food habits of American alligators vary considerably, from insects to reptiles, fish, and birds. Examining the stomach contents of alligators they noted American Coots (*Fulica americana*) and undetermined other bird species. Anhingas (*Anhinga anhinga*), Double-crested Cormorants (*Phalacrocorax auritus*), and White Ibis (*Eudocimus albus*) were found in American alligator stomachs sampled in Florida as reported by Rice et al. (2007). Mottled Ducks (*Anas fulvigula*) have been reported as prey for alligators (Elsey et al. 2004). Taylor (1986) reported finding remains of Mallard (*A. platyrhynchos*), Wood Duck (*Aix sponsa*) and American Coot in the stomachs of alligators collected in Louisiana. Delany et al. (1988) and Delany et al. (1999) list other bird species found in stomachs sampled from American alligators in Florida.

As far as I am aware there are no previously published reports of Green Herons consumed by an American alligator. American alligators are opportunistic carnivores and prey species appears to be related to habitat occupied, alligator size and the size and vulnerability of prey species encountered (Chabreck 1972, Delany and Abercrombie 1986). This note documents a natural source of mortality for Green Herons in Florida. Additional information is needed on the diet of American alligators occupying brackish environments in Florida.

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LITERATURE CITED

- CHABRECK, R. H. 1972. The foods and feeding habits of alligators from fresh and saline environments in Louisiana. *Proceedings of the Annual Conference of Southeastern Association of Game and Fish Commissioners* 25:117-124.
- DAVIS, W. E., AND J. A. KUSHLAN. 1994. Green Heron (*Butorides virescens*). In *The Birds of North America*, No. 129 (A. Poole and F. Gill, Eds.). The Academy of Natural Sciences, Philadelphia, and The American Ornithologists' Union, Washington, D.C.
- DELANY, M. F., AND C. L. ABERCROMBIE. 1986. American alligator food habits in Northcentral Florida. *Journal of Wildlife Management* 50:348-353.
- DELANY, M. F., S. B. LINDA, AND C. T. MOORE. 1999. Diet and condition of American alligators in four Florida Lakes. *Proceedings of the Annual Conference of Southeastern Association of Fish and Wildlife Agencies*, 53:375-389.
- DELANY, M. F., A. R. WOODWARD, AND I. H. KOCHER. 1988. Nuisance alligator food habits in Florida. *Florida Field Naturalist* 16:90-96.
- ELSEY, R. M., P. L. TROSCLAIR, AND J. T. LINSCOMBE. 2004. The American alligator as a predator of mottled ducks. *Southeastern Naturalist* 3:381-390.
- HANCOCK, J. 1999. *Hérons and Egrets of the World*. Academic Press, London, UK.
- HOLT, S. F. 1961. Foot-stirring in the Green Heron. *Wilson Bulletin* 73:386.
- KUSHLAN, J. A. 1976. Feeding behavior of North American herons. *Auk* 93:86-94.
- MEYERRIECKS, A. J. 1966. Additional observations on use of the feet by foraging herons. *Auk* 83:471-472.
- MEYERRIECKS, A. J. 1971. Further observations on use of the feet by foraging herons. *Wilson Bulletin* 83:435-438.
- TAYLOR, D. 1986. Fall food habits of adult alligators from cypress lake habitat in Louisiana. *Proceedings of the Annual Conference of the Southeastern Association of Fish and Wildlife Agencies* 40:338-341.
- RICE, A. N., J. P. ROSS, A. R., WOODWARD, D. A. CARBONNEAU, AND H. F. PERCIVAL. 2007. Alligator diet in relation to alligator mortality on Lake Griffin, FL. *Southeastern Naturalist* 6:97-110.
- WOLF, J. L., D. K., BRADSHAW, AND R. H. CHABRECK. 1987. Alligator feeding habits: New data and a review. *Northeast Gulf Science* 9:1-8.

REVIEW

Petrels, Albatrosses, and Storm-Petrels of North America, by Steve N. G. Howell. 2012. Princeton University Press, Princeton, New Jersey. ISBN 978-0-691-13211. \$45.00 hardcover. 483 pages.

For Florida birders seeking new additions to the State's avifauna, no place beckons like the pelagic waters off the Atlantic coast. For decades now, we have seen how boats off North Carolina, plying the rich warm waters of the Gulf Stream, have consistently come up with amazing records, mostly from the diverse assemblage of birds known as tubenoses (order Procellariiformes). It is an impressive list: Black-browed Albatross, Fea's Petrel, Bulwer's Petrel, Bermuda Petrel (Cahow), Trindade Petrel, Cape Verde Shearwater, European Storm-Petrel, Swinhoe's Storm-Petrel, White-faced Storm-Petrel, and Black-bellied Storm-Petrel. Yet even though the Gulf Stream passes about 90 km off the Florida Coast, not one of these species has ever been documented from Florida. A primary reason for this is that Florida birders traditionally have not had many opportunities to reach the Gulf Stream. In addition, pelagic birding in general has been hampered by identification challenges, tricky taxonomy, and poor depictions in field guides. However, pelagic birding in Florida is gaining steam, with more and more frequent trips, and it seems only a matter of time before those species above are gradually added to the Official Florida List. To further stoke our inspiration to visit these waters, along comes an impressive new tool to aid in watching, understanding, and, in particular, identifying these amazing birds.

Steven N. G. Howell's *Petrels, Albatrosses, and Storm-Petrels of North America* (hereafter *Petrels*) fills a gigantic hole on the bookshelves of pelagic birders. Almost three decades ago, Peter Harrison's *Seabirds: An Identification Guide* (1983) first brought the world of pelagic birding to a general birding audience. At that time, pelagic birding was in its infancy. Several species were known from little more than a few museum skins, taxonomy had little to go on other than what those few skins could tell us, and field identification was largely conjecture. Since that time pelagic birding has taken off. Remote island groups and atolls across the globe are being visited on weeks-long cruises to find poorly known species; well known areas (e.g., Monterey Bay, Outer Banks of North Carolina) are seeing dozens of trips per year; molecular-based taxonomies are being combined with insights from vocalizations and molt to radically change the taxonomic landscape; and digital photography and the internet are making 1000s of images a mouse click away. What was sorely needed was a synthesis that brings all this new information and imagery together. Howell's book more than succeeds in accomplishing this task.

This is more of a reference than a field guide, as it is big and heavy, but that is all the more space to fill it with an incredible assortment of diagnostic images of each species. As such, it is similar to the *Gulls of North America* by Howell and Jon Dunn. I will have a copy of *Petrels* along on all North American pelagic trips, kept dry in the cabin. This is a photographic guide, well bound with good paper. The images are amazingly sharp, of good size, and appropriately captioned. The book covers all tubenose species (ca. 70) that have occurred in the Americas from Panama north to the Arctic. Family accounts with identifications points, and replete with informative larger images, introduce each major group (large shearwaters, small shearwaters, Atlantic gadfly petrels, Pacific gadfly petrels, other petrels, north Pacific albatrosses, vagrant albatrosses, white-rumped storm-petrels, dark rumped storm-petrels, and distinctive storm-petrels). The species accounts follow, each with an identification summary and then sections that

cover taxonomy (more below), etymology of scientific and English names, status and distribution, field identification, habitat and behavior, description, molt, and a slew of images, usually ten or more for the more regularly occurring species, usually more than five for the rare species, and often several of similar species that have as yet not appeared in waters covered by this book. Useful introductory sections cover Ocean Habitats, Phylogeny, Biogeography and Vagrancy, Taxonomy and Identification Framework, Field Identification, How to see Tubenoses, and Conservation.

The most controversial aspect of *Petrels* is Howell's individualistic taxonomy. To no one's surprise, the taxonomy used by Howell is quite different from traditional taxonomies of the tubenoses (e.g., by the North American Checklist Committee of the American Ornithologists' Union). He does not hesitate to split any population that he feels is diagnosable. For those not keeping up with the latest papers on the subject, many species names will be a surprise. Band-rumped Storm-Petrel is split into three species (Grant's, Madeiran, and Darwin's storm-petrels), Leach's Storm-Petrel is split into four species (Ainley's, Chapman's, Townsend's, and Leach's storm-petrels), Scopoli's Shearwater is split from Cory's Shearwater, Desertas and Zino petrels are split from Fea's (Cape Verde) Petrel, and Barolo Shearwater is split from Little Shearwater. He often states within species accounts that even further splits may be warranted with more data. Although some of the splits advocated by Howell will no doubt be accepted, some appear to be premature for recognition at the species level.

Unfortunately, nowhere in this volume does Howell provide a definition of what he considers a species. It seems his thinking is closest to the phylogenetic species concept (PSC), which gives species-level recognition to any diagnosable population, and does not concern the classic yardstick of reproductive isolation. Like the PSC, it seems that Howell has little use for subspecific designations. This thinking falls in line with the majority of current seabird biologists, who are quick to split seabird populations breeding on different islands no matter how small the differences, often with an emphasis on conservation. In many cases these may be differences in molt timing and/or vocalizations, which render field identification at sea even more tricky. It is largely unknown, however, the degree to which these differences can reproductively isolate populations. In the case of Scopoli's Shearwater, band recoveries of Cory's within Scopoli's breeding populations suggest a lack of reproductive isolation. With the predicted changes in climate and increasing sea levels in the coming decades, some breeding seabird populations are likely to become unstable. Populations that are currently allopatric may come together. If the differences between two populations are not reproductively isolating, then the populations will mix. It seems that a more stable classification would consider such populations subspecies until more is known.

Nonetheless, today's pelagic birders, armed with Howell's book, will have a leg up on the biology, conservation, and especially identification of this fascinating group of seabirds. With increased knowledge and correct identifications, those interested in the conservation of tubenoses, many of which have small and imperiled populations, will have a better idea of breeding areas, population sizes, and nonbreeding distributions. I think that nearly every Florida birder, even those whose only encounters with tubenoses may be dreams of finding a wayward petrel at a local inland lake during a hurricane, will want this book on their bookshelf.

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FIELD OBSERVATIONS

Winter Report: December 2012-February 2013.—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Electronic submissions to the FOC should be in the following format: species, number of individuals, age and sex of the bird(s), color morph if applicable, location (including county), date, observer(s), and significance. Seasons are winter (December-February), spring (March-May), summer (June-July), and fall (August-November). Submit observations to regional compilers within two weeks after the close of each season, or to the state compiler within one month. Addresses of the compilers follow this report.

Sight-only observations are considered “reports” while only those observations supported by verifiable evidence (photographs, video or audio recordings, or specimens) are called “records.” Species for which documentation is required by the FOC and by the FOS Records Committee (FOSRC; <fosbirds.org/official-florida-state-bird-list>) are marked here with an asterisk (*). A county designation (in italics) accompanies the first-time listing of each site in this report. Abbreviations in this report are: AFB = Air Force Base, EOS = end of season, NERR = National Estuarine Research Reserve, nm = nautical miles, NP = National Park, NS = National Seashore, NSRA = North Shore Restoration Area, NWR = National Wildlife Refuge, SF = State Forest, SP = State Park, STA = Stormwater Treatment Area, STF = sewage treatment facility, WMA = Wildlife Management Area, and N, S, E, W etc., for compass directions. Bold-faced entries denote birds newly reported or verified in Florida, or record numbers. Photographs or video- or audio-recordings archived by the FOC are identified by a plus (+); BPA catalog numbers are provided for the most significant of these.

SUMMARY OF THE WINTER SEASON

Without doubt, the avian event of the season was the unprecedented and massive invasion by Razorbills, perhaps the result of disruption of their southern wintering areas by Hurricane *Sandy* in October 2012. The invasion was first noted 7 December and continued through the winter, as some birds returned northward. All coastal regions were affected (there were no inland reports); the BPA contains records from 19 counties. Dozens of specimens were salvaged. Among other FOSRC rarities were: Neotropic Cormorant again bred at Wakodahatchee Wetlands; the state's second Snowy Owl record, near St. Augustine; and the state's first Costa's Hummingbird banded at Tallahassee. Largely to save space, most reports include only the name(s) of the first and often last observer(s); few reports are accompanied by “et al.” Few reports from Christmas Bird Counts are referenced here.

SPECIES ACCOUNTS

BLACK-BELLIED WHISTLING-DUCK: 140 at Dade City (*Pasco*) 27 Dec (D. Gagne); 150 over Vero Beach (*Indian River*) 26 Jan (B. Wagner); 162 at Lake Wales (*Polk*) 28 Jan (A. Delorey); 600 along the N side of Lake Istokpoga (*Highlands*) 29 Jan (M. McMillian); 175 at Cocoa (*Brevard*) 22 Feb (D. Freeland).

FULVOUS WHISTLING-DUCK: 11 at Lake Apopka NSRA (*Orange*) 16 Dec, and as many as 35 there 18 Jan-EOS (H. Robinson, J. Dinsmore); 5 at Circle B Bar Reserve (*Polk*) 29 Dec-EOS (C. Rasmussen, R. Morris); 30 at T. M. Goodwin WMA (*Brevard*) 4 Feb (D. Freeland).

- GRAYLAG GOOSE x CANADA GOOSE: 1 presumed hybrid at Merritt Island NWR (*Brevard*) 26 Dec-1 Jan (E. Kwater, +R. Folkening, BPA 5079).
- SNOW GOOSE: 26 at St. Marks NWR (*Wakulla*) 1 Dec (J. Murphy); 1 blue morph at Fernandina (*Nassau*) 1 Dec (P. Leary); 3 white morphs at The Villages (*Sumter*) 1-14 Dec (L. Felker); 1 blue morph at Twin Lakes (*Hillsborough*) 1-9 Dec (R. Newell); 7 (3 blue & 4 white morphs) at Merritt Island NWR 7 Dec (P. Hueber); 4 at Pumpkin Hill (*Duval*) 15 Dec (E. Brown); 1 white morph near Wesley Chapel (*Pasco*) 30 Dec (J. Greenlaw); 2 heard at Lake Apopka NSRA 1 Jan (H. Robinson); 1 at "Dump Marsh," Homestead (*Miami-Dade*) 19 Jan (R. Torres).
- ROSS'S GOOSE: 1 at St. Marks NWR 1 Dec (J. Murphy).
- *CAKCLING GOOSE: 4 reported at Apalachee Correctional Institution near Sneads (*Jackson*) 11-21 Jan (+J. Killian, BPA 6221; +R. Smith, BPA 6264a-b).
- *TRUMPETER SWAN: 1 unbanded adult at Plant City (*Hillsborough*) 12 Dec (+R. Newell) reportedly had been present about a year (D. Pugsley); 1 at Davie (*Broward*) 21 Dec (+K. Decker).
- MANDARIN DUCK: 1 male at Lake Mirror Park, Lakeland (*Polk*) 19 Jan (C. Fredricks).
- GADWALL: 5 at Iona Lakes, Fort Myers (*Lee*) 5 Dec-EOS (+D. Albert, C. Ewell); 510 at Lake Apopka NSRA 6 Jan (H. Robinson); 59 at Brandon (*Hillsborough*) 10 Feb (E. Kwater).
- EURASIAN WIGEON: 1 male at Merritt Island NWR 16 Dec-EOS, and 2 males there 26 Jan (M. Gardler, +M. Brothers); 1 male at STA-1E (*Palm Beach*) 2 Feb (B. Hope, A. Peligrinelli).
- AMERICAN BLACK DUCK: 1 at Lake Apopka NSRA 21 Dec (H. Robinson).
- BLUE-WINGED TEAL x CINNAMON TEAL: 1 male at Merritt Island NWR 18 Feb-EOS (+C. Cox, L. Deaner, +K. Schmidt); 1 at Green Cay Wetlands (*Palm Beach*) 22 Feb (+E. Mathews); 1 at STA-1E on two occasions (fide C. Weber).
- CINNAMON TEAL: 1 at St. Marks NWR 1 Dec (+J. Murphy); 1 male at Bunker Hill Park (*Manatee*) 16 Dec (+R. Morris); of 2 adult males at Merritt Island NWR since 30 Dec (E. Kwater, +M. Brothers, +K. Schmidt), one was shot by a hunter in late Jan (fide T. Dunkerton); 1 male at STA-1E (*Palm Beach*) 5 Jan (J. Shelley); 1 male at the *Sarasota* Celery Fields 16 Jan (N. Klein); 1 male wintered at STA-5 (*Hendry*; M. England).
- *WHITE-CHEEKED PINTAIL: 1 at Pelican Island NWR (*Indian River*) 29 Jan-EOS (D. Miller, +R. Geisler, BPA 5151a-g).
- GREEN-WINGED TEAL: 195 at Holiday (*Pasco*) 16 Dec (D. Gagne).
- CANVASBACK: 10 at STA-1E 16 Dec-2 Feb (C. Weber); 9 at Hardee Lakes Park (*Hardee*) 16 Jan (C. Fredricks).
- REDHEAD: 4 at STA-1E (*Palm Beach*) 16 Dec-2 Feb (B. Hope); 6,500 at Honeymoon Island SP (*Pinellas*) 22 Dec (E. Kwater, D. Gagne); 3,500 at Cockroach Bay Preserve (*Hillsborough*) 6 Jan (E. Kwater, B. Ahern); 10,000 at Fort De Soto Park (*Pinellas*) 20-21 Jan, then at Shell Key Preserve (*Pinellas*) 3 Feb (R. Smith); 15,000 at Green Key, New Port Richey (*Pasco*) 25 Jan (D. Gagne); 12,000 at Clearwater Harbor 20 Feb (J. Wells); 3,500 at Merritt Island NWR 28 Feb (T. Rodriguez).
- GREATER SCAUP: 1 male at Honeymoon Island SP 22 Dec (D. Gagne); 20 at Merritt Island NWR 26 Dec (E. Kwater); 5 at Gulf Harbors (*Pasco*) 13 Jan-EOS (D. Gagne); 1 inland at Clear Lake, San Antonio (*Pasco*) 16 Jan (D. Gagne); 1 male at Crescent Lake, St. Petersburg (*Pinellas*) to 21 Jan (R. Smith).
- LESSER SCAUP: 250,000 along 4 km of the Indian River Lagoon south of Pineda Causeway (*Brevard*) 17 Jan (D. Freeland); 335 at Lake Apopka NSRA 10 Feb (H. Robinson).
- COMMON EIDER: 1 at Huguenot Memorial Park (*Duval*) 16-17 Dec (K. Dailey); 1 at Clearwater Beach 12 Feb (+D. McRee, BPA 5472a-c) furnished the first *Pinellas* record.
- SURF SCOTER: 2 juveniles at Sanibel Island (*Lee*) 8 Dec (D. & L. Stokes); 200 at Canaveral NS (*Brevard*) 10 Dec (M. Harris).

- WHITE-WINGED SCOTER: 1 on the Halifax River at Ormond Beach (*Volusia*) 4 Dec (M. Brothers); 1 at Ponce de Leon Inlet (*Volusia*) 14 Dec (M. Brothers); 2 at Canaveral NS 10 Dec (+M. Harris); 1 at Dunedin Causeway (*Pinellas*) 20 Jan (J. Wells).
- BLACK SCOTER: 2 along Dunedin Causeway 2-29 Dec (R. Mask); 200 at Canaveral NS 10 Dec (M. Harris); 400 at Ponce de Leon Inlet 14 Dec (M. Brothers, D. Simpson); 32 passed Stump Pass SP, Englewood (*Charlotte*) 14 Dec (+C. Herzog); 15 at Honey-moon Island SP 15 Dec (D. Gagne, E. Kwater); hundreds passed Boynton Inlet (*Palm Beach*) 15 Dec (D. Bales); 336 at Miami Beach (*Miami-Dade*) 15 Dec (R. Torres, T. Mitchell); 6 at Paynes Prairie Preserve SP (*Alachua*) 16 Dec (+G. McDermott, BPA 5049) furnished the first inland record in Florida; as many as 4 at Anclote Gulf Park, Holiday 18 Dec-10 Jan (D. Gagne, +S. Mann); 40 at Clearwater Pass (*Pinellas*) 18 Dec (D. Sauvageau); 1 at Pine Island Park (*Hernando*) 19 Dec (A. & B. Hansen); 4 at Fort De Soto Park 19 Dec (R. Smith); 1 female at Fort Zachary Taylor Historic SP, Key West 23 Dec-3 Jan (C. Goodrich); as many as 30 off Sanibel Island during Dec with lesser numbers elsewhere in *Lee* all winter (fide C. Ewell); 16 off Crandon Park Beach (*Miami-Dade*) 8 Jan (R. Diaz); 2 at Fred Howard Park, Tarpon Springs (*Pinellas*) 11 Jan (T. Mast); 30 at Pensacola Beach (*Escambia*) 30 Jan (B. & L. Duncan).
- LONG-TAILED DUCK: 1 at The Villages (*Sumter*) 8-9 Dec (+A. Roush); 2 at Canaveral NS 10 Dec-19 Jan (+M. Harris, P. Hueber); 1 at Schultz Preserve (*Hillsborough*) 16 Dec-26 Jan (C. Fisher, +D. Margeson); 1 at Green Key 18 Jan (D. Gagne); 1 at Vero Beach 19 Jan (fide A. Kratter, specimen to FLMNH); 1 along Courtney Campbell Causeway (*Pinellas*) 26 Feb (+J. Wells), where 1 wintered this past year.
- BUFFLEHEAD: 25 at The Villages (*Lake*) 16 Jan (J. Dinsmore); 36 at Bayport Park (*Hernando*) 19 Jan (D. Gagne); 42 at Fort Island Gulf Beach (*Citrus*) 9 Feb (D. Gagne).
- COMMON GOLDENEYE: 1 along Fruitville Road (*Sarasota*) 24 Dec-11 Jan (K. Young); 1 at Wesley Chapel (*Pasco*) 29 Dec-8 Jan (+B. Pranty, D. Gagne); 1 at Green Key 18 Jan (D. Gagne); 1 at Naples (*Collier*) 20 Jan (M. Higgins, +V. McGrath, BPA 5483); 1 at Leesburg (*Lake*) 29 Jan-1 Feb (+L. Streeper, +A. Horst); 9 at Fort Island Gulf Beach 18 Feb (M. Gardler).
- HOODED MERGANSER: 294 in one flock at The Villages (*Lake*) 8 Dec (J. Dinsmore).
- RED-BREASTED MERGANSER: 1,800 at Sarasota Bay (*Sarasota*) 5 Jan (+V. Ponzo); singles at Lake Apopka NSRA 20 Jan & 22 Feb (H. Robinson); 146 at Green Key 24 Jan (D. Gagne).
- NORTHERN BOBWHITE: 8 at Tiger Point (*Duval*) 29 Dec (K. Dailey).
- CHUKAR: 1 east of Trenton (*Gilchrist*) 31 Dec (+A. Kent).
- RED-THROATED LOON: 1 at Tomoka SP (*Volusia*) 4 Dec (M. Brothers); 1 that flew past Fort Lauderdale (*Broward*) 14 Dec was described as being a "[s]lender loon with gray upperparts, neck and head held below horizontal (R. Titus); 1 at Destin (*Okaloosa*) 17 Dec (B. Purdy); 1 at Huguenot Memorial Park 17 Dec (K. Dailey); 1 at Pensacola Beach 20 Dec (L. Duncan); 1 at South Ponte Vedra Park (*St. Johns*) 5 Feb (T. Rodriguez); 6 at Alligator Point (*Franklin*) 21 Feb (J. Murphy).
- PACIFIC LOON: 1 at Gulf Breeze (*Santa Rosa*) 9 Dec (B. Duncan); 1 at Lake Santa Fe (*Alachua*) 6-22 Feb (+J. Hintermister and R. Rowan, BPA 5110a-d) furnished the first inland record in Florida; 1 at Fort Pickens, Gulf Islands NS (*Escambia*) 18 Feb (B. & L. Duncan); 1 at Destin 27 Feb (B. Purdy).
- COMMON LOON: 4 at Lake Apopka NSRA 7 Dec (H. Robinson); 1 at The Villages (*Sumter*) 10 Dec (J. Dinsmore); surveys off Crandon Park Beach tallied 574 birds in 196 min over five days, 27 Dec-2 Jan (R. Diaz); 13 at Bill Baggs Cape Florida SP (*Miami-Dade*) 2 Jan (R. Diaz); 1 at Hardee Lakes Park 13 Jan (C. Fredricks).
- HORNED GREBE: 120 at Honeymoon Island SP 22 Dec (E. Kwater, D. Gagne); 124 at Green Key 24 Jan (D. Gagne).
- *RED-NECKED GREBE: 1 at Lake Jackson (*Leon*) 16 Jan (+J. Erickson, BPA 6302).

- EARED GREBE: 1 at Alligator Lake (*Columbia*) 30 Nov-1 Dec (J. Krummrich); 1 at Lake Apopka NSRA 5 Dec (H. Robinson); 1 in alternate plumage at Margate (*Broward*) 3 Mar had been present ca. 2 weeks (+D. & G. Jones, BPA 6287a-d).
- CORY'S SHEARWATER: 1 at Green Key 18 Dec (B. Pranty, D. Gagne); 2 at Pensacola Beach 20 Dec (B. & L. Duncan); 1 at Playalinda, Canaveral NS 30 Dec (E. Kwater).
- GREAT SHEARWATER: 1 off Ormond-By-The-Sea (*Volusia*) 3 Dec 2011 (M. Brothers); 1 at St. George Island (*Franklin*) 16 Feb (+C. Wood, BPA 6286).
- SOOTY SHEARWATER: 1 bird 1.5 nm off Clearwater Beach 10 Dec (+W. Spina, BPA 4604); 1 at Pensacola Beach 20 Dec (B. Duncan); 1 at Tom Renick Park, Ormond Beach (*Volusia*) 22 Dec (H. Robinson).
- *MANX SHEARWATER: 1 off Miami Beach 15 Dec (R. Torres, +T. Mitchell, BPA 5485); 1 at Pensacola Beach 23 Dec (B. & L. Duncan, +S. Duncan, BPA 6268a-b).
- MAGNIFICENT FRIGATEBIRD: 22 off Crandon Park Beach 29 Dec (R. Diaz).
- BROWN BOOBY: 1 at Alafia Banks, Hillsborough Bay (*Hillsborough*) 6 Dec (E. Plage); 1 adult at JaxPort Terminal, Jacksonville (*Duval*) 7 Dec (J. Crumitie); 1 at Port Canaveral Jetty Park (*Brevard*) 17 Dec (+M. Harris); 2 at Fort Zachary Taylor Historic SP 31 Dec (M. Iliff, C. Goodrich).
- RED-FOOTED BOOBY: 1 immature 7 nm off Clearwater Beach landed on a boat and rode it to shore 5 Dec (+S. Czaplicki, BPA 4854a-c).
- NORTHERN GANNET: 210 (90% adults) off Miami Beach 15 Dec (R. Diaz); 30 at Anclote Gulf Park, Holiday 8 Feb (D. Gagne).
- *NEOTROPIC CORMORANT: 3 at Wakodahatchee Wetlands (*Palm Beach*) to mid-Jan but only 1 afterward, which paired with a Double-crested Cormorant and produced 3 nestlings by 24 Feb (+M. Berney; BPA 6225, 6274); 1 at Matheson Hammock Park (*Miami-Dade*) 24-26 Dec (+M. Iliff, BPA 6149a-b).
- AMERICAN WHITE PELICAN: 45 over Little Hamaca Park, Key West 27 Feb (C. Goodrich).
- AMERICAN BITTERN: 1 at Sheffield Park, Jacksonville 1 Jan (K. Dailey); 1 at Guana Tolomato Matanzas NERR (*St. Johns*) 6 Dec (D. Reed).
- GREAT BLUE HERON: 1 at Mount Dora (*Lake*) swallowed a pocket gopher (*Geomys pinetis*) 15 Jan (E. Horn).
- GREAT BLUE HERON, WHITE MORPH: 1 attended a nest with a blue morph at Cortez Key (*Sarasota*) 1 Dec (V. Ponzo, +M. Vance); 1 at Hobie Beach (*Miami-Dade*) 12 Dec (R. Diaz).
- GREAT BLUE HERON, BLUE MORPH X WHITE MORPH: 1 at Myakka River SP (*Sarasota*) 7 Dec (+C. Herzog).
- GREAT EGRET: 1 with an orange wing tag at Orlando (*Orange*) 9 Dec was banded as a nestling at Ontario, Canada during summer 2012 (T. Rodriguez *fide* C. Weseloh).
- CATTLE EGRET: 1 with lime feather coloration in W *St. Lucie* 17 Feb (+D. Sutherland).
- YELLOW-CROWNED NIGHT-HERON: 1 at Pensacola (*Escambia*) 20 Dec (P. McLeod).
- WHITE IBIS X SCARLET IBIS: 1 very pale pink adult at Palm Bay (*Brevard*) 21 Jan (+T. Karr).
- WHITE-FACED IBIS: 2 at Lake Apopka NSRA 26 Dec, and 1 there 1 Jan (H. Robinson).
- ROSEATE SPOONBILL: 1 at Lake Apopka NSRA 1 Jan (H. Robinson); 2 at Orlando 5 Feb (A. Boyle).
- TURKEY VULTURE: 1,000 at Cockroach Bay (*Hillsborough*) 2 Dec (E. Kwater).
- OSPREY: 1 at Islamorada (*Monroe*) 1 Jan was thought to be of the Caribbean race *P. h. ridgwayi* (+M. Iliff, BPA 6269a-g), of which there is no previous Florida report.
- SWALLOW-TAILED KITE: 1 at Six Mile Cypress Slough Preserve, Fort Myers 15 Feb (B. Renpenning); 1 at Nine Mile Pond, Everglades NP (*Miami-Dade*) 16 Feb (R. Diaz); 1 at Gainesville (*Alachua*) 21 Feb (R. Robinson); 1 at Brooksville (*Hernando*) 21 Feb (+S. Mann); 1 at Orlando 21 Feb (+A. Boyle); 1 at East Palatka (*Putnam*) 23 Feb (B. Pranty); 1 at Sawgrass Lake Park (*Pinellas*) 23 Feb (R. Smith, +R. Harrod); 7 at Bonita Springs (*Lee*) 24 Feb (D. Gallagher); 2 at Jay B. Starkey Wilderness Park (*Pasco*) 25 Feb (D. Gagne); 5 over The Villages (*Sumter*) 26 Feb (A. Horst).

- WHITE-TAILED KITE: 2 along Research Road, Everglades NP (*Miami-Dade*) 17 Dec (R. Diaz).
- SNAIL KITE: 1 remained at Edward Medard Park to 9 Dec (fide B. Ahern); 1 at Circle B Bar Reserve 16 Jan (+D. Sauvageau).
- MISSISSIPPI KITE: 1 at Cantonment (*Escambia*) 15 Jan (B. Callaway).
- BALD EAGLE: 24 at International Paper Wetlands (*Escambia*) 30 Dec (J. Callaway).
- GREAT BLACK-HAWK: 1 adult wintered at Virginia Key (*Miami-Dade*; R. Diaz).
- BROAD-WINGED HAWK: 2 juveniles at Virginia Key 4 Dec-EOS (R. Diaz); 1 juvenile at Bill Baggs Cape Florida SP 9 Dec-EOS (R. Diaz); 1 at Maximo Park (*Pinellas*) 15 Dec (E. Plage); 1 adult 1.6 km north of Sebastian Inlet (*Brevard*) 29 Dec (+M. Harris); 1 at Fort De Soto Park 1 Jan (J. Guerard); 1 along Tampa Bypass Canal (*Hillsborough*) 5 Jan (+B. Ahern, C. Fisher).
- SHORT-TAILED HAWK: 1 light morph over DeLand (*Volusia*) 11 Dec (+P. May); 1 dark morph at Ormond Beach 16 Dec (+S. Petruniak); 1 at South Fort Myers (*Lee*) 17 Dec (C. Ewell); singles at New Port Richey 9 Jan (light morph) and 24 & 28 Feb (D. Gagne); 2 (dark & light morphs) courted over Orlando Wetlands Park (*Orange*) 8 Feb (B. Anderson, +P. Hueber); 1 dark morph over S Merritt Island 8 Feb (D. Freeland); 1 light morph at Sanibel Island 10 Feb (C. Ewell) with other reports there of dark and light morphs all winter; 1 light morph over Hickory Hammock Preserve (*Highlands*) 12 Feb (+W. Jones); 1 dark morph at Sawgrass Lake Park 13 Feb (S. Tavaglione), and 2 dark morphs there 18 Feb (E. Plage); 3 dark morphs at Wekiwa Springs SP (*Orange*) 15 Feb (B. Stalnaker); 1 light morph over Melbourne (*Brevard*) 23 Feb (C. Fisher, +B. Pranty); 2 wintered at Six Mile Cypress Slough Preserve and Lakes Park, Fort Myers (J. Padilla, V. McGrath).
- SWAINSON'S HAWK: 1 at Eglin AFB (*Okaloosa*) 30 Nov (M. Swan); 1 light-morph juvenile at Lake Apopka NSRA 2-9 Dec (H. Robinson).
- BLACK RAIL: 1 along Coastal Prairie Trail, Everglades NP (*Monroe*) 29 Dec-27 Jan (R. Torres, T. Mitchell).
- VIRGINIA RAIL: 2 along Research Road, Everglades NP 17 Dec (R. Diaz).
- PURPLE SWAMPHEN: 2 at Green Cay Wetlands 2-5 Jan (J. Miller, J. Boyd).
- PURPLE GALLINULE: 1 adult at Blue Spring SP (*Volusia*) 27 Jan (+D. Hilquist); 1 at Lake Wales 10 Feb (A. Delorey).
- SANDHILL CRANE: 10 at Cecil Commerce Center, Jacksonville 6 Jan (R. Rowan); 465 headed north over The Villages (*Sumter*) in 1 hr 5 Feb (J. Dinsmore).
- WHOOPIING CRANE: 2 (adult and juvenile) at West Miramar Preserve (*Broward*) 22 Dec-10 Feb (K. Schneider).
- BLACK-BELLIED PLOVER: 240 or more at Crandon Park Beach 6 Dec-EOS (R. Diaz).
- AMERICAN GOLDEN-PLOVER: 1 near Eastpoint (*Franklin*) 8 Dec (+J. Murphy, BPA 6277).
- SNOWY PLOVER: 2 at Alafia Bank, Hillsborough Bay 18 Dec (+C. Cassels); 10 at North Anclote Bar (*Pasco*) 8 Feb included a "brown" bird possibly of the W subspecies (+B. Pranty, D. Gagne, V. Ponzio); 20 birds and 2 nest scrapes at Carlos Pointe, Fort Myers Beach (*Lee*) 20 Feb (K. Laakkonen).
- WILSON'S PLOVER: 4 at Crandon Park Beach 6 Dec-EOS (R. Diaz).
- SEMPALMATED PLOVER: 330 at Shell Key Preserve (*Pinellas*) 3 Feb (R. Smith); 135 at North Anclote Bar 8 Feb (D. Gagne).
- PIPING PLOVER: 45 at Crandon Park Beach 6 Dec-10 Feb, and with 37 birds there 15 Feb-EOS included birds banded in Michigan, Nebraska, and Virginia (R. Diaz); 4 at Snook Islands Natural Area, Lake Worth (*Palm Beach*) 24-30 Dec (A. Knafel); 23 at Shell Key Preserve 3 Feb (R. Smith); 16 at North Anclote Bar 8 Feb (D. Gagne, B. Pranty, V. Ponzio).
- AMERICAN OYSTERCATCHER: 149 along the Amelia River (*Nassau*) 29 Jan (P. Leary).
- AMERICAN AVOCET: 5 at "Cutler Wetlands" (*Miami-Dade*) 17 Feb (R. Diaz); 100 at Cedar Key (*Levy*) 18 Feb (M. Gardler).

- SOLITARY SANDPIPER: 1 at T. M. Goodwin WMA 10 Jan (D. Freeland); 1 at Gainesville 28 Feb (S. McCullers).
- WHIMBREL: 4 at Anclote Gulf Park 9 Jan (D. Gagne); 5 at Honeymoon Island SP 12 Jan (D. Gagne, E. Kwater).
- LONG-BILLED CURLEW: 1 at Marco Island (*Collier*) 23 Dec (M. Higgins); 1 at Fort De Soto Park 21 Jan-20 Feb (B. Ahern); 2 at Indian Pass (*Franklin*) 18 Feb (J. Murphy); 1 wintered along Joe Overstreet Road, Lake Kissimmee (*Osceola*; +M. Vetricsek); 1 adult male wintered at Bunche Beach (*Lee*) for perhaps its 10th season (C. Ewell).
- WILLET: 400 at Shiloh Marsh, Merritt Island NWR (*Volusia*) 28 Feb (T. Rodriguez).
- RUDDY TURNSTONE: 150 at North Anclote Bar 8 Feb (D. Gagne).
- RED KNOT: 278 at Shell Key Preserve 3 Feb (R. Smith); 42 at North Anclote Bar 8 Feb (D. Gagne, B. Pranty, V. Ponzio).
- SANDERLING: 240 at North Anclote Bar 8 Feb (D. Gagne, B. Pranty, V. Ponzio).
- WESTERN SANDPIPER: 375 at North Anclote Bar 8 Feb (D. Gagne et al.).
- LEAST SANDPIPER: 425 at one pond east of Dade City (*Pasco*) 21 Jan (D. Gagne).
- PURPLE SANDPIPER: 4 at Huguenot Memorial Park 19 Dec (K. Dailey); 1 at Sebastian Inlet SP (*Brevard*) 10 Jan (D. Freeland); 2 wintered at Ponce de Leon Inlet (M. Brothers).
- DUNLIN: 2,200 at Shell Key Preserve 3 Feb (R. Smith); 575 at North Anclote Bar 8 Feb (D. Gagne et al.); 2,000 at Shiloh Marsh 28 Feb (T. Rodriguez).
- LONG-BILLED DOWITCHER: 200 at Merritt Island NWR 16 Dec (M. Gardler).
- WILSON'S SNIBE: 60 at Cockroach Bay 27 Jan (E. Kwater).
- AMERICAN WOODCOCK: 7 at Lake Apopka NSRA 21 Dec (P. Hueber, G. Williams); 2 along Research Road, Everglades NP 8 Feb (R. Diaz).
- RED PHALAROPE: 1 at Vilano Beach (*St. Johns*) 22 Dec (D. Doyle); 1 at Port Canaveral Jetty Park 28 Dec (+E. Schunke); 1 at Playalinda Beach, Canaveral NS 18 Jan (+M. Harris); 5 birds 45 nm off Ponce de Inlet 28 Jan (M. Brothers).
- BLACK-LEGGED KITTIWAKE: 1 bird 22 nm off St. Petersburg Beach (*Pinellas*) 27 Jan (+E. Plage); 2 juveniles (1 black-billed and 1 yellow-billed) at South Skyway Fishing Pier (*Hillsborough* and *Manatee*) 4 Feb-EOS (+A. Salas, BPA 5104; +R. Epstein, BPA 5107a-b).
- BONAPARTE'S GULL: 1 immature at Virginia Key 6 Dec-8 Feb (R. Diaz); 1 at Taylor Park (*Miami-Dade*) 15 Dec (J. Boyd); 8 immatures at Key West 29 Dec-5 Jan (C. Goodrich, M. Iliff); 30 at Lassing Park, St. Petersburg 5 Jan (R. Smith).
- HERRING GULL: 242 at North Anclote Bar 8 Feb (D. Gagne, B. Pranty, V. Ponzio).
- HERRING GULL X LESSER BLACK-BACKED GULL: 1 adult at Daytona Beach Shores 20 Feb (+M. Brothers, BPA 6235).
- ICELAND GULL: 1 first-cycle at Anastasia SP (*St. Johns*) 9 Dec (A. Ryan); 1 first-cycle at Fort Clinch SP 19 Dec (+W. Domke); 1 at Fort Island Gulf Beach 26 Dec (H. Nagy, D. Brigham); 1 at Helen Cooper Park, Jacksonville 28 Dec (D. Pridgen); 1 first-cycle at Playalinda Beach, Canaveral NS 18 Jan (+M. Harris); 4 single first-cycles at Daytona Beach Shores variously 27 Jan-26 Feb (+M. Brothers).
- LESSER BLACK-BACKED GULL: 6 (1 adult) at Sanibel Island 15 Dec (C. Ewell); 1 banded adult ("F05") returned to Daytona Beach Shores by 7 Jan-EOS (+M. Brothers); 3 at Anclote Gulf Park 15 Jan (K. Tracey); 1 at Jim Woodruff Dam (*Gadsden*) 19 Jan (+M. Brothers); 6 (2 adults) at Naples 20 Jan (M. Higgins, C. Ewell); 40 (17 adults) at Crandon Park Beach 17 Feb (R. Diaz).
- GLAUCOUS GULL: 1 first-cycle at Ponce Inlet 14 Dec (M. Brothers, D. Simpson); singles at Anastasia SP (*St. Johns*) 1-26 Jan (first-cycle) and 4 Feb (adult; both +D. Doyle); 1 at Huguenot Memorial Park 6 Jan (B. Tinsman); 1 first-cycle at Cocoa 22 Jan (D. Freeland); 1 at Marineland (*St. Johns*) 1 Feb (+G. Williams); 1 first-cycle at Daytona Beach Shores 19-25 Feb (M. Brothers).

GREAT BLACK-BACKED GULL: 1 adult at Lake Monroe, Sanford (*Seminole*) 3 Dec (J. Dinsmore); 4 (1 adult, 3 first-cycle) at Crandon Park Beach 6 Dec-EOS (R. Diaz); 1 adult at Sanibel Island 15 Dec (K. Werner); 1 at Naples 20 Jan (M. Higgins).

GULL-BILLED TERN: 3 at Werner-Boyce Salt Springs SP (*Pasco*) 29 Dec (K. Tracey).

CASPIAN TERN: 4 at Crandon Park Beach 6 Dec-EOS (R. Diaz); 23 at Silver Lake, Leesburg (*Lake*) 17 Feb (J. Dinsmore).

BLACK TERN: 1 at Pensacola Beach 20 Dec (B. Duncan); 1 at Port Richey (*Pasco*) 30 Dec-10 Jan (P. Day, M. Hubbard, +B. Pranty, BPA 5058); 1 at Naples 21 Jan (V. McGrath).

COMMON TERN: 1 at Cayo Costa Island (*Lee*) 1 Dec (C. Ewell); 6 at Sanibel Island 15 Dec (+C. Ewell); 3 at North Shore Park, St. Petersburg 1 Jan (+M. Burns); 1 at Cockroach Bay 13-19 Jan (E. Kwater).

FORSTER'S TERN: 229 at Lake Apopka NSRA 18 Jan (H. Robinson).

ROYAL TERN: 1 at Paynes Prairie Preserve SP 8 Dec (B. Shea, F. Lee).

*ELEGANT TERN: 1 at Siesta Key Beach (*Sarasota*) 1-11 Dec (T. Mossbarger).

BLACK SKIMMER: 355 at Holiday 29 Jan (D. Gagne); 300 at Fort Island Gulf Beach 4 Jan (M. Gardler); 870 at Marco Island 22 Jan (T. & V. Below); 500 at Cedar Key 18 Feb (M. Gardler).

POMARINE JAEGER: 3 at John's Pass (*Pinellas*) 15 Dec (D. Goodwin, B. Pranty); 7 from Tom Renick Park, Ormond Beach 22 Dec (H. Robinson); 3 off Crandon Park Beach 29 Dec (R. Diaz); 1 bird 5 nm off St. Teresa (*Franklin*) 27 Jan (J. Murphy); 1 at Charlotte Harbor (*Charlotte*) 2 Feb (J. Bouton); 2 adult light morphs off Miami Beach 23 Feb (R. Torres).

PARASITIC JAEGER: 9 at Ponce de Leon Inlet 3 Dec (M. Brothers); 1 adult off Miami Beach 15 Dec (R. Torres, T. Mitchell); 1 from Green Key 18 Dec (D. Gagne, B. Pranty); 34 from Tom Renick Park, Ormond Beach 22 Dec (H. Robinson); 2 at Honeymoon Island SP 22 Dec (D. Gagne); 1 off Crandon Park Beach 27-29 Dec (R. Diaz); 1 at Pensacola Beach 31 Dec (A. Forster, J. Lloyd); 1 adult light morph at Fort Zachary Taylor Historic SP 2 Jan (C. Goodrich); 1 from North Anclote Bar 8 Feb (D. Gagne, B. Pranty, V. Ponzio); 1 at Venice Pier (*Sarasota*) 13 Jan (T. Mossbarger); as many as 4 harassed gulls each evening at Daytona Beach Shores (M. Brothers).

DOVEKIE: 1 at Jacksonville sometime in Dec (*fide* A. Kratter).

*THICK-BILLED MURRE: 1 at Fort Clinch SP 14 Dec (+E. Schunke, BPA 4644).

*RAZORBILL: 1 at New Smyrna Beach (*Volusia*) 7 Dec (M. Brothers); 1 at Guana Tolomato Matanzas NERR 11 Dec (C. Hooker); 7 singles at Ponce de Leon Inlet variously 12 Dec-21 Feb (M. Brothers, P. Hueber); 1 at Anna Maria Island (*Manatee*) 12-13 Dec (V. Rudolph, +V. Ponzio) increased to 4 on 18 Dec, 20 on 19 Dec, and eventually 31 through 21 Jan (*fide* B. Ahern); 1 at Fort De Soto Park 13 Dec (E. Plage) increased to 7 on 21-22 Dec (J. Mangold), with 5 there to 10 Jan, and 1 to 21 Jan (*fide* R. Smith); as many as 20 variously in *Lee* 13 Dec-31 Jan (+A. Menk; *fide* C. Ewell), with 8 ca. 25 nm off Captiva Island 16 Dec (C. Sobczak); 1 at Matanzas Inlet (*St. Johns*) 14 Dec (M. Brothers); 60 flew past Fort Lauderdale 14 Dec (R. Titus, A. Cyr); **600** on the Dade County Christmas Bird Count 15 Dec included 136 that flew past Miami Beach (+R. Torres, +T. Mitchell, BPA 5486a-b) and 32 off Virginia Key Beach (R. Diaz); 1 at Fort Clinch SP 16 Dec (P. Leary); 1 at Huguenot Memorial Park 16 Dec (K. Dailey); 1 at Merritt Island NWR 16 Dec (M. Gardler); 3 at Honeymoon Island SP 16 Dec, 15 on 22 Dec, and 1 there 28 Dec (J. Mangold, D. Gagne); 1 at Pass-A-Grille (*Pinellas*) 16 Dec (R. Smith); 3 at Venice Jetty (*Sarasota*) 16-19 Dec (B. Rossheim); 16 off Crandon Park Beach 16 Dec (R. Diaz); 1 at Canaveral NS 17 Dec (D. Freeland); ca. 25 flew north past Anclote Gulf Park 17 Dec (B. Pranty, D. Goodwin), with 1 there 9 Jan (D. Gagne), and 20 on 15 Jan (+K. Tracey, BPA 5492); singles at John's Pass 17 Dec (C. Gjervold) and 18 Dec (K. Nelson); 7 at Pensacola Beach 18 Dec, and singles there 19-27 Dec, 7 Feb, and 25 Feb (B. & L. Duncan, D. Ware); 1 at Clearwater Pass 18 Dec (C. Gjervold); 6 off Mayport (*Duval*) 19 Dec (K. Dailey); 4 flew south past Green Key Park 19 Dec (D.

Gagne, B. Pranty, +S. Mann), with singles there 18 & 25 Jan (D. Gagne); 1 bird 5 nm off Clearwater Beach 19 Dec (S. Czaplicki); 12 at Casperson Beach (*Sarasota*) 20 Dec (C. Herzog); 18 along 6 km of shoreline at Naples Beach (*Collier*) 20 Dec (T. Below, W. Burkett); 1 at Redington Pier (*Pinellas*) 22-24 Dec (I. Hernandez, +B. Pranty); 1 at Robinson Preserve (*Manatee*) 22 Dec (S. Wilson); 1 in upper Tampa Bay along the Howard Frankland Bridge (*Pinellas*) 23 Dec (D. Goodwin); 2 at Key West 23-30 Dec (C. Goodrich); 3 at Hudson Beach Park 24-29 Dec (+K. Tracey); 2 at Belleair Beach (*Pinellas*) 24 Dec (fide R. Smith); 1 near Egmont Key NWR (*Hillsborough*) 25 Dec (B. Ahern); 1 at Tom Renick Park, Ormond Beach 22 Dec (H. Robinson); 1 at Pine Island Park 26 Dec (D. Simpson, +B. Pranty); singles at Tierra Verde 26 Dec & 27 Feb (B. Gale); 6 birds 3-4 nm south of Pensacola Beach 27 Dec (P. Beasley); 1 at Gulf Harbors 29 Dec (M. Gardler); 2 at Anclote Key Preserve SP (*Pinellas*) 29 Dec (D. Deterra); 1 at Fort Island Gulf Beach 4 Jan (M. Gardler); 3 rehabilitated birds released at Bill Baggs Cape Florida SP 7 Jan (R. Diaz); 40 at Alligator Point 10 Jan (J. Murphy); 17 at St. Marks NWR 17 Jan (G. Griffin, R. Christen); 1 at Daytona Beach Shores 25 Jan (M. Brothers); 1 at Gulf Breeze 27 Jan (L. Duncan); 1 at Treasure Island (*Pinellas*) 26 Jan (D. Caldwell); 1 in Hillsborough Bay 26 Jan (C. Cassels); 2 off Ponce de Leon Inlet 28 Jan (M. Brothers); 1 at Destin 1 Feb (J. Kittinger); 1 at Key Largo (*Monroe*) 4 Feb (+P. Frezza, BPA 6189).

MOURNING DOVE: 1 fledgling at Altamonte Springs (*Seminole*) 14 Dec (P. Hueber).

MANGROVE CUCKOO: 2 at Bunche Beach, Fort Myers 9 Feb (+R. Parks, BPA 5137).

SMOOTH-BILLED ANI: 1 at Eco Pond, Everglades NP (*Monroe*) 12-13 Dec (G. Davis); 1 at Honeymoon Island SP 15 Dec (+D. Gagne, BPA 5038, E. Kwater).

GROOVE-BILLED ANI: 1 at Paynes Prairie Preserve SP 16 Dec-EOS (J. Mays).

BARN OWL: 1 at South Fort Myers 8 Dec (V. McGrath).

BURROWING OWL: 1 pair with 3 chicks at Cape Coral (*Lee*) 16 Dec (R. Parks, B. Saltonstall).

*SNOWY OWL: 1 at Vilano Beach (*St. Johns*) 2 Jan (+S. Ossmer, BPA 5076a-b).

SHORT-EARED OWL: singles at Lake Apopka NSRA 21-28 Dec (H. Robinson); 1 along Coastal Prairie Trail, Everglades NP 29 Dec (R. Torres, T. Mitchell); 1 at Fort Island Gulf Beach 4 Jan (M. Gardler).

LESSER NIGHTHAWK: 1 at "Dump Marsh" 29 Jan (R. Torres); 1 at Fort Pickens 1-7 Feb (A. Harper, P. James, D. Stangeland).

CHUCK-WILL'S-WIDOW: 1 banded at Possum Long Preserve (*Martin*) 29 Jan (+N. Price); 1 at New Port Richey 24 Feb (D. Gagne).

*BROAD-BILLED HUMMINGBIRD: 1 banded at Tallahassee 29 Jan-EOS (F. Dietrich, +R. Brown, BPA 5394a-c).

BUFF-BELLIED HUMMINGBIRD: 1 at Apalachicola (*Franklin*) 28 Dec (+J. Spohrer, J. Murphy).

RUBY-THROATED HUMMINGBIRD: 1 at Jacksonville 31 Dec (L. Royce); 1 at Old Town (*Dixie*) 25 Feb (S. Fronk); 34 (26 in the Panhandle, 8 in the peninsula) banded variously 5 Dec-17 Feb (fide F. Bassett).

*COSTA'S HUMMINGBIRD (*CALYPTE COSTAE*): 1 immature male banded at Tallahassee 13 Dec (F. Dietrich, +R. Brown, BPA 6283) provided the first Florida record.

*CALLIOPE HUMMINGBIRD: 1 banded at Niceville (*Okaloosa*) 5 Dec (F. Bassett); 1 banded at Tallahassee 7 Dec (fide F. Bassett); 1 at Apalachicola 10 Jan (M. Wilson, +J. Spohrer) was banded 2 Feb (fide F. Bassett).

RUFOUS HUMMINGBIRD: 1 adult male at Lakeland 5 Feb-EOS (+J. Misiaszek); 2 wintered at Ocala (*Marion*; A. Gimenez, T. Green); 4 wintered in *Hernando* (D. Love, B. Hansen); 1 female wintered at Mead Garden, Winter Park (*Orange*; A. Boyle); 60 (53 in the Panhandle, 7 in the Peninsula south to *Hernando*) banded variously 5 Dec-24 Feb (fide F. Bassett).

BLACK-CHINNED HUMMINGBIRD: singles banded at Tallahassee 14 & 27 Dec (F. Dietrich); 1 banded at Freeport (*Walton*) 5 Jan (fide F. Bassett).

- RED-HEADED WOODPECKER: 2 (adult and immature) wintered at Matheson Hammock Park (R. Diaz, C. Sanchez).
- HAIRY WOODPECKER: 1 at Nocatee (*St. Johns*) 31 Jan (J. Rolke).
- COCKATIEL: 1 at St. Petersburg 20 Dec (+E. Plage).
- BUDGERIGAR: 16 at Hernando Beach (*Hernando*) 25 Dec (D. Gagne, B. Pranty, V. Ponzo).
- MONK PARAKEET: 2 at Orlando 16 Dec (P. Hueber).
- NANDAY PARAKEET: 160 in S *Pinellas* 9 Dec (R. Smith); 30 at Fort Myers 6 Jan (T. Obrock).
- BLUE-CROWNED PARAKEET: 30 at Gulfport (*Pinellas*) 9 Dec (R. Smith), and 45 there 7 Feb (J. Wells); 7 at Vero Beach 23 Feb reportedly had been present about 1 year (*fide* B. Wagner).
- LEAST FLYCATCHER: 12 variously at Lake Apopka NSRA during Dec, with 6 there 2 & 16 Dec (H. Robinson); 1 at St. Leo (*Pasco*) 27 Dec-EOS (D. Gagne, +B. Pranty); 1 at Merritt Island 10 Jan (D. Freeland); 3 at Frog Pond WMA (*Miami-Dade*) 30 Jan (R. Diaz); 1 at Micanopy (*Alachua*) 5 Feb-EOS (J. Mays); as many as 4 wintered at Paynes Prairie Preserve SP (J. Mays, A. Zions).
- *SAY'S PHOEBE: 1 at Fort Walton Beach STF (*Okaloosa*) 3 Dec-28 Jan (M. Swan, +S. McNemar, BPA 5055); 1 wintered at Astatula (*Lake*; P. Hueber et al.).
- VERMILION FLYCATCHER: 1 adult male at Carrabelle (*Franklin*) 3 Dec (L. Gridley, J. Murphy); 1 at Gulf Breeze 15 Dec-17 Feb (B. & G. Bremser); 1 at Paynes Prairie Preserve SP to 18 Feb (S. McCullers); 1 female at San Antonio (*Pasco*) 27 Dec-EOS (+S. Mann, D. Gagne); 2 males wintered at Orlando Wetlands Park (B. Stalnaker); 1 male at Frog Pond WMA to 14 Feb (J. Boyd); 1 female wintered at Frog Pond WMA (J. Boyd).
- ASH-THROATED FLYCATCHER: 6 wintered at Lake Apopka NSRA, with 5 on 23 Jan (H. Robinson); 1 at St. Leo 30 Dec-EOS (V. Ponzo, +B. Pranty et al.); 1 at "Viera Wetlands" 26 Jan (+M. Gardler); 1 at Six Mile Landing, Guana WMA (*St. Johns*) 5 Feb (T. Rodriguez); as many as 10 wintered at Paynes Prairie Preserve SP (J. Mays, E. Robertson); 1 wintered at Frog Pond WMA (R. Diaz, C. Sanchez).
- BROWN-CRESTED FLYCATCHER: 1 at Lake Apopka NSRA 28 Dec-EOS (H. Robinson); 1 at Frog Pond WMA 5 Jan-EOS (J. Boyd, C. Sanchez); 1 at Southern Glades WMA (*Miami-Dade*) 4 Jan-2 Feb (R. Diaz, C. Sanchez); 1 at Mahogany Hammock, Everglades NP (*Miami-Dade*) 30 Jan (R. Diaz).
- LA SAGRA'S FLYCATCHER: 1 at Virginia Key 4-25 Jan (R. Diaz); 1 at Green Cay Wetlands 9 Jan-EOS (E. Matthews, C. Sanchez).
- *TROPICAL KINGBIRD: 1 wintered at STA-5 (+*fide* M. England); 1 wintered at Frog Pond WMA (R. Diaz, C. Sanchez); 1 wintered at the C-357 sparrow fields (*Miami-Dade*; B. Rapoza).
- *CASSIN'S KINGBIRD: 1 at Gulf Breeze 15-19 Dec (B. & G. Bremser, B. & L. Duncan, BPA 5894); 1 at Bunnell (*Flagler*) 17 Dec-EOS (+M. Brothers, BPA 5043); as many as 3 at STA-5, 29 Dec-EOS (M. England).
- WESTERN KINGBIRD: 7 at Minneola (*Lake*) 12 Dec (+S. Simmons); 1 at *Flagler* Landfill 14 Dec (M. Wilson); 1 at Little Talbot Island SP (*Duval*) 15 Dec (J. Knoll); 22 at Lake Apopka NSRA 21 Dec (H. Robinson); 1 at St. Leo 5 Jan (+S. McNemar); 1 at Cockroach Bay Preserve 6-9 Jan (B. Ahern); 1 at San Antonio 21-23 Jan (D. Gagne); 10 at The Villages (*Marion*) 28 Jan (J. Dinsmore); 1 at Bartram Farms (*St. Johns*) 4 Feb (+D. Reed); 1 bird 14 km west of Clewiston (*Hendry*) 13 Feb (E. Kwater); 1 at Cedar Key 18 Feb (M. Gardler); 8 off L-8 Canal (*Palm Beach*) 23 Feb-EOS (B. Hope).
- GRAY KINGBIRD: 1 at Egan's Greenway (*Nassau*) 14 Dec (E. Van Norman); 1 at STA-5, 29 Dec-EOS (M. England).
- SCISSOR-TAILED FLYCATCHER: 1 at Alligator Point 6 Dec (J. Murphy); 1 at Ruskin to 16 Dec (*fide* B. Ahern); 1 at Fernandina 23 Dec-5 Feb (P. Leary); 25 at Stock Island (*Monroe*) 30 Dec (C. Goodrich); 1 at San Antonio 5 Jan-EOS (D. Gagne); 2 at NSRA 12 Jan (P. Hueber, G. Williams); 2 at Sanibel Island 20 Jan (D. & L. Stokes); 4 off L-8 Canal 23 Feb-EOS (B. Hope).

- *THICK-BILLED VIREO: 1 at Fort Zachary Taylor Historic SP 31 Dec (C. Goodrich, +M. Iliff, BPA 5135a-f).
- BELL'S VIREO: 1 at A. D. "Doug" Barnes Park (*Miami-Dade*) 15 Dec-4 Jan (R. Diaz); 1 often in song at Frog Pond WMA 4 Jan-27 Feb (R. Diaz); 1 at Paynes Prairie Preserve SP 6-12 Jan (C. Burney, +J. Mays); 1 in song at Virginia Key 7 Jan (R. Diaz).
- YELLOW-THROATED VIREO: 2 at Bill Baggs Cape Florida SP 6 Dec-EOS (R. Diaz); 1 in song at Brooker Creek Preserve (*Pinellas*) 23 Feb (P. Trunk).
- RED-EYED VIREO: 1 at Indigenous Park, Key West 5-20 Jan (M. Whiteside, +C. Goodrich, BPA 5924) furnished the second winter record in Florida.
- WARBLING VIREO: 1 at South Miami (*Miami-Dade*) 4 Jan-EOS (+J. Barros, BPA 5089a-b, +R. Torres; BPA 5091a-b) furnished the first winter record in Florida.
- FISH CROW: 1 at New Port Richey 20 Feb fed on bird seed scattered on the ground (+D. Gagne).
- PURPLE MARTIN: 1 at Lake Apopka NSRA 6 Jan (H. Robinson); 2 males at St. Petersburg 6 Jan (D. Margeson); 1 at Cockroach Bay Preserve 6 Jan (B. Ahern, E. Kwater); 2 at Werner-Boyce Salt Springs SP, Bayonet Point (*Pasco*) 16 Jan (K. Tracey); 2 at "Viera Wetlands" 22 Jan (D. Freeland); 1 at Gulf Harbors 30 Jan (D. Gagne); 3 at Fernandina Beach (*Nassau*) 2 Feb (P. Leary).
- MARTIN SPECIES: 1 at Fort Zachary Taylor Historic SP, Key West 3-4 Feb (+C. Goodrich, BPA 5100a-e; +F. Virrazzi, BPA 5120a-h).
- NORTHERN ROUGH-WINGED SWALLOW: 12 at Werner-Boyce Salt Springs SP 16 Jan (K. Tracey); 1 at Lake Apopka NSRA 27 Feb (H. Robinson).
- BANK SWALLOW: 1 found freshly dead at Moore Haven (*Glades*) 18 Feb (+D. Simpson, BPA 5126, specimen to UCF) furnished the first extant winter record in Florida.
- BARN SWALLOW: 1 at Apalachicola 8 Dec (J. Murphy); 2 at Frog Pond WMA 8 Dec (C. Sanchez); singles at Lake Apopka NSRA 18 & 24 Feb, and 11 there 27 Feb (H. Robinson); 6 at Alachua (*Alachua*) 25 Feb (P. Burns).
- CAROLINA CHICKADEE: 1 at Weedon Island Preserve (*Pinellas*) 8 Dec (E. Plage), and 4 there 3 Jan (M. Burns).
- RED-BREASTED NUTHATCH: 3 at Lake Apopka NSRA 12 Nov-16 Jan (P. Hueber, H. Robinson); 2 at Weedon Island Preserve 17 Nov-15 Dec (S. Tavaglione); 1 at Sylvan Lake Park, Sanford (*Seminole*) to 4 Dec (P. Hueber); 2 at Seminole SF (*Lake*) 1-25 Dec (P. Hueber); 1 at Ocala National Forest (*Marion*) 2 Dec (D. & S. Shaddix); 1 at St. James City (*Lee*) 12 Dec (M. Adams); 1 east of Fruitland Park (*Lake*) 12-14 Dec (L. Felker); 1 at Santa Fe Swamp (*Bradford*) 14 Dec-2 Jan (C. Leveault); 1 at Brooker Creek Preserve 22 Dec (M. Pooling); 22 at St. Joseph Peninsula SP (*Gulf*) 27 Dec (B. Bodjack, J. Murphy); 3 at Weekiwachee Preserve (*Hernando*) 30 Dec-EOS (J. McKay); 1 at Etoniah Creek SF (*Putnam*) 31 Dec (B. Chitty); 1 at Merritt Island NWR 20 Jan (M. Harris); 2 at Jupiter Ridge Natural Area (*Palm Beach*) 27 Jan-3 Feb (L. McQueen, B. Roberts, +T. Ramsey, BPA 6309a-b) furnished the southernmost record in Florida; 1 at Sarasota 13 Jan (J. Eachus); 3 at Boyd Hill Nature Preserve, St. Petersburg to 2 Feb (R. Smith); 1 at Graham Swamp Preserve (*Flagler*) 3 Feb (T. Rodriguez); 2 at Bayard Conservation Area (*Clay*) 19 Feb (L. McCullagh); 4 wintered at Key Vista Nature Park (D. Gagne); numerous reports from the W Panhandle (fide B. Duncan); 11 wintered at Gainesville (R. Rowan, A. Zions); as many as 18 (3 Jan) wintered at Cedar Key (D. Henderson).
- WHITE-BREASTED NUTHATCH: 1 at Avalon Beach (*Santa Rosa*) 15 Dec (T. Barbig).
- CAROLINA WREN: 1 female at Tallahassee laid one egg 31 Jan, and the clutch of four eggs hatched 16 Feb (G. Simmons).
- AMERICAN ROBIN: 2 at Virginia Key 5 Dec (R. Diaz); 1 partial albino at Tallahassee 5 Jan (+J. Cavanagh); 1 with a partially white head at DeLeon Springs (*Volusia*) 19 Feb (+M. Brothers); 1 with a partially white head at Palm Harbor (*Pinellas*) 23 Feb (+B. Surman).

- GRAY CATBIRD: 100 at Frog Pond WMA 4 Jan (R. Diaz).
- BROWN THRASHER: 1 at Fort Zachary Taylor Historic SP 31 Dec-8 Jan (M. Iliff, C. Goodrich).
- SPRAGUE'S PIPIT: 7 at Apalachicola Airport (*Franklin*) 28 Dec (A. Moss, J. Murphy); 2 at Kanapaha Prairie (*Alachua*) to 16 Dec (T. Goodman).
- OVENBIRD: 1 at Reddie Point (*Duval*) 19 Jan (K. Dailey).
- LOUISIANA WATERTHRUSH: 1 at O'Leno SP (*Columbia?*) 18 Dec (+D. Segal, BPA 5418a-c); 1 at Greynolds Park (*Miami-Dade*) 15 Dec (J. Boyd); 1 at Lake Apopka NSRA 22-24 Feb (H. Robinson).
- NORTHERN WATERTHRUSH: 9 along the *Pasco* coast variously 30 Nov-6 Dec (K. Tracey); 7 at Lake Apopka NSRA 9 Dec, and 6 there 4 Jan (H. Robinson); 1 at Guana Tolomato Matanzas NERR 4 Jan (D. Doyle).
- BLUE-WINGED WARBLER: 1 at Matheson Hammock Park 5 Dec-24 Feb (+R. Torres, BPA 4787, 5973).
- SWAINSON'S WARBLER: 1 at Long Key SP (*Monroe*) 15 Jan (+J. Engler, BPA 5085).
- TENNESSEE WARBLER: 1 female at Boca Chica Key (*Monroe*) 5 Jan (C. Goodrich).
- ORANGE-CROWNED WARBLER: 1 at Rotary Park, Cape Coral 15-17 Dec (C. Ewell).
- NASHVILLE WARBLER: 1 at Honeymoon Island SP 22 Dec (D. Gagne); 1 at San Antonio 27 Dec (D. Gagne); 1 at Paynes Prairie Preserve SP to 9 Feb (M. Manetz).
- *MACGILLIVRAY'S WARBLER: 1 at Tropical Park (*Miami-Dade*) to 14 Dec (A. Harper).
- AMERICAN REDSTART: 1 at Lake Seminole (*Pinellas*) 15 Dec (I. Hernandez, +J. Fisher).
- CAPE MAY WARBLER: 1 at New Port Richey 23 Dec (D. Gagne).
- NORTHERN PARULA: 1 at Tallahassee to 22 Jan (F. Rutkovsky); 1 at St. Augustine 14 Jan (D. Doyle).
- YELLOW WARBLER: 1 banded at Lake Okeechobee (*Okeechobee*) 6 Dec (+T. Beck, BPA 5042a-d); 1 at Leesburg 12 Jan (+L. Streeper); 1 at St. George Island 3 Feb (S. Klink, E. Orf); 1 at Circle B Bar Reserve 3 Feb (C. Fredricks); 1 at Fort Walton Beach STF 9 Feb (L. Duncan); 1 male wintered at Gulf Harbors (+K. Tracey, D. Gagne).
- PRAIRIE WARBLER: 1 at Guana Tolomato Matanzas NERR 8 Dec (D. Reed).
- BLACK-THROATED GRAY WARBLER: 1 at Palm Beach Gardens (*Palm Beach*) 6 Jan-EOS (C. Kline, S. Bollinger).
- BLACK-THROATED GREEN WARBLER: 1 near Upper Tampa Bay Park (*Hillsborough*) 22 Dec (D. Bowman).
- WILSON'S WARBLER: 1 at Baymeadows, Jacksonville 2 Dec-24 Feb (J. Cocke); 1 at S Jacksonville 11 Dec (C. Bailey); 1 at Fort Lauderdale 15 Dec (R. Titus); 1 at Merrie Christmas Park (*Miami-Dade*) 16 Dec-12 Jan (C. Sanchez, R. Diaz); 1 at Apalachicola 28 Dec (A. Moss, +J. Murphy); 1 at Loxahatchee NWR (*Palm Beach*) 30 Dec (K. Walters); 1 or singles at Gulf Breeze 1 Jan (B. Duncan) & 20 Feb (L. Duncan).
- YELLOW-BREASTED CHAT: 4 at Hole-in-the-Donut, Everglades NP 17 Dec (M. Davis); 1 at Green Cay Wetlands 9 Jan (E. Matthews); 1 at Tallahassee 4 Feb-EOS (+J. Cavanagh); 3 wintered at Paynes Prairie Preserve SP (J. Mays).
- BANANAQUIT: 1 adult at Bill Baggs Cape Florida SP 6-17 Jan (+R. Diaz, BPA 5074).
- WESTERN SPINDALIS: 1 female at Key West Botanical Garden, Stock Island 28 Dec-EOS (J. Cooper, C. Goodrich, +N. Glickman, BPA 5109); 1 female at Virginia Key to 2 Feb (+R. Diaz); 1 black-backed male at Spanish River Park (*Palm Beach*) 1 Jan (A. Peligrinelli, M. Gomes).
- BACHMAN'S SPARROW: 1 at Golden Aster Scrub Preserve (*Hillsborough*) 2 Dec (B. Ahern).
- CHIPPING SPARROW: 1 partial albino at Clermont (*Lake*) 11 Jan (+J. Stefancic).
- CLAY-COLORED SPARROW: singles at Lake Apopka NSRA 30 Dec-4 Jan, 6 Feb, and 15 Feb (H. Robinson); 1 at Anclote Gulf Park 1 Jan (+K. Tracey); 4 at Frog Pond WMA 4 Jan (R. Diaz); 1 at Cockroach Bay Preserve 11 Jan (J. Guerard); 1 at the *Sarasota* Celery Fields 18 Jan (O. Comora); 2 singles 1.6 km apart southeast of Dade City 2 Feb (fide D. Gagne) & 11 Feb (D. Gagne); 1 at Fort Pickens 7-24 Feb (D. Stangeland, J. Calaway).

LARK SPARROW: 1 southeast of Dade City 7-17 Feb (+D. Gagne).

GRASSHOPPER SPARROW: 1 at Fort De Soto Park 10-27 Jan (D. Sauvageau) furnished the first park winter record.

HENSLow's SPARROW: of 4 captured at Weekiwachee Preserve 19 Jan, 2 had been banded there in 2012 (M. Korosy).

LE CONTE's SPARROW: 1 banded at Weekiwachee Preserve 19 Jan, and 2 banded there 9 Feb (M. Korosy); 1 at Marl Bed Flats (*Seminole*) 27 Jan (P. Hueber, G. Williams).

NELSON's SPARROW: 1 banded at Shell Key Preserve (*Pinellas*) 16 Feb (L. Deaner, R. Smith).

SALT MARSH SPARROW: 2 at Fort De Soto Park 12 Dec-20 Jan (E. Plage); 1 at Pasco Palms Park, Holiday 29 Dec-13 Jan (D. Gagne, +B. Pranty); 2 captured at Shell Key 16 Feb had been banded there in 2012 (L. Deaner).

FOX SPARROW: 9 wintered in *Alachua* (F. Goodwin et al.), including 4 (3 in one bush) at Paynes Prairie Preserve SP 16 Dec (A. & G. Kent) and 1 at Gainesville 15 Feb-EOS (A. Kratter); 1 at Gemini Springs Park, DeBary (*Volusia*) 25 Feb-EOS (+A. Evenstad, BPA 6227).

SONG SPARROW: 1 at Boyd Hill Nature Preserve 5-15 Dec (R. Smith).

LINCOLN's SPARROW: singles at Lake Apopka NSRA 19 Dec & 13 Feb, and 3 there 4 Jan (H. Robinson); 1 bird 6 km north of Sebastian Inlet (*Brevard*) 29 Dec (+M. Harris); 1 at Felts Preserve, Palmetto (*Manatee*) 12 Jan (B. Rossheim); 1 at Possum Branch Preserve, Palm Harbor 26 Jan (T. Kalbach); 1 southeast of Dade City 2 Feb (D. Gagne); 1 at Circle B Bar Reserve 3 Feb (C. Fredricks).

SWAMP SPARROW: 100 at Cockroach Bay Preserve 9 Dec (B. Ahern).

WHITE-THROATED SPARROW: 1 at Cockroach Bay Preserve 7 Jan (J. Fitzgerald, L. Deaner).

WHITE-CROWNED SPARROW: 1 at the C-357 sparrow fields 1 Dec (C. Sanchez); 1 at Bell Creek Preserve (*Hillsborough*) 9 Dec (D. Bowman); 1 at Possum Branch Preserve 1 Jan (J. Wells); 10 at Cockroach Bay Preserve 6-11 Jan (C. Fredricks, B. Ahern); 1 at Fort De Soto Park 20-24 Jan, and 2 there 24 Feb (R. Smith).

SUMMER TANAGER: 1 at S Jacksonville 14 Dec-EOS (C. Murphy); 5 wintered at Gainesville (A. Kent, C. Gordon et al.).

WESTERN TANAGER: 1 at Elaine Gordon Enchanted Forest Park (*Miami-Dade*) 8-12 Dec (B. Roberts); 1 female at C. S. Lee Park, Geneva (*Seminole*) 22 Dec (B. Stalnaker, G. Bretz); 1 at Lake Park (*Palm Beach*) 22 Dec-8 Feb (+C. Kline, S. Bollinger).

ROSE-BREASTED GROSBEAK: 1 at Tallahassee 8 Dec-EOS (J. Harrington, +A. Heupel); 1 at Lakeland 31 Dec (+B. Snow); singles at Gainesville 20 Jan (C. Gordon) and 18 Feb-EOS (S. Lasseter); 1 at Fort Walton Beach (*Okaloosa*) 21 Jan (S. Goodman); 1 wintered at Vero Beach (+B. Wagner).

BLACK-HEADED GROSBEAK: 1 at Stuart (*Martin*) 8 Dec (+B. & N. LaFramboise); 1 at Cantonment 16-18 Feb (L. & O. Marvil, +B. & J. Callaway).

BLUE GROSBEAK: 1 at Boyd Hill Nature Preserve 6 Dec (S. Tavaglione); singles at Lake Apopka NSRA 16-21 Dec & 26 Dec (H. Robinson).

PAINTED BUNTING: 4 at Cockroach Bay Preserve 9 Dec (B. Ahern); 1 male at Fort Pickens 28 Jan-24 Feb (A. Carr, T. Amacker).

*WESTERN MEADOWLARK: 1 in N *Escambia* 24-28 Feb (G. Davis, +B. Purdy, BPA 6273a-b).

YELLOW-HEADED BLACKBIRD: 1 at Carrabelle Beach (*Franklin*) 12 Dec (+C. A. Griffin); 1 at Lake Apopka NSRA 23 Dec (H. Robinson); 1 adult male at Brandon 1-17 Jan (+B. Bowen, *vide* B. Ahern).

RUSTY BLACKBIRD: as many as 16 at Gainesville 9 Dec-8 Feb (G. Williams, K. Collingwood et al.); 1 at Alligator Point 22 Dec (+J. Murphy); 50 at Micanopy 2 Feb (C. Burney); 3 at Crystal River (*Citrus*) 8 Feb-EOS (+C. Fredricks).

BREWER's BLACKBIRD: 1 female wintered at Bayport for the second winter (D. Love).

BOAT-TAILED GRACKLE: 1 male with pale irides at Ponce de Leon Inlet 23 Jan (+M. Brothers); 28 males & 11 females at Floridatown (*Santa Rosa*) 21 Feb (B. & L. Duncan).

BROWN-HEADED COWBIRD: 200 over Jupiter Inlet Lighthouse Natural Area (*Palm Beach*) 19 Feb (J. Hailman).

BRONZED COWBIRD: 1 at Apalachicola 3 Dec (L. Gridley, J. Murphy); 1 at Avalon Beach 15 Dec (L. Duncan); 5 at Clewiston 15 Feb (E. Kwater).

ORCHARD ORIOLE: 1 at Apalachicola 10 Jan-19 Feb (B. Kinzie, +E. Orf, BPA 6290); 1 immature male at Cockroach Bay 27 Jan (C. Cassels, E. Kwater).

*BULLOCK'S ORIOLE: 1 at Lake Apopka NSRA 2 Dec (H. Robinson); 1 at Tallahassee 18 Jan (F. Rutkovsky); 1 at Hernando (*Citrus*) 22-26 Feb (H. Nagy).

SPOT-BREASTED ORIOLE: 1 adult at Tampa 3 Feb (+J. Hill, BPA 6272a-d) furnished the first record in Florida away from the S Atlantic coast.

HOUSE FINCH: 30 at New Port Richey 14 Dec (D. Gagne); 1 in song at Vero Beach 14 Jan (B. Wagner); 2 at Marco Island 24 Jan (C. Roman).

PINE SISKIN: 1 at Lake Apopka NSRA 2 Dec (H. Robinson); 1 at Tallahassee 18 Jan (F. Rutkovsky); 1 at Hernando (*Citrus*) 22-26 Feb (H. Nagy).

AMERICAN GOLDFINCH: 51 at Bill Baggs Cape Florida SP 5 Dec (R. Diaz); 100 at Virginia Key 15 Dec (R. Diaz).

Contributors: Maryanne Adams, Brian Ahern, Doug Albert, Todd Amacker, Carol Bailey, Danny Bales, Tom Barbig, Joe Barros, Fred Bassett, Pam Beasley, Tyler Beck, Ted & Virginia Below, Bruce Bodjack, Sonia Bollinger, Jeff Bouton, Barbara Bowen, Dave Bowman, John Boyd, Andy Boyle, Bill & Greta Bremser, Greg Bretz, Dave Brigham, Michael Brothers, Elizabeth Brown, Roy Brown, W. B. Burkett, Chris Burney, Mark Burns, Patricia Burns, Dick Caldwell, Brenda & Jerry Callaway, Andrew Carr, Carol Cassels, Jim Cavanagh, Bill Chitty, Ron Christen, Julie Cocke, Keith Collingwood, Owen Comora, Cameron Cox, James Crumitie, Al Cyr, Stan Czaplicki, Kevin Dailey, Gary Davis, Michelle Davis, Lauren Deaner, Kurt Decker, Alan Delorey, Gail Deterra, Robin Diaz, Fred Dietrich, Jim Dinsmore, Wil Domke, Diana Doyle, Bob & Lucy Duncan, Scot Duncan, Tom Dunkerton, Jim Eachus, Margaret England, Jan Engler, Robert Epstein, John Erickson, Amy Evanstad, Charlie Ewell, Linda Felker, Charlie Fisher, Judy Fisher, Joe Fitzgerald, Rick Folkenning, Ann Forster, Cole Fredricks, Dave Freeland, Pete Frezza, Sharon Fronk, Dave Gagne, Bill Gale, Dan Gallagher, Murray Gardler, Reinhard Geisler, Amie Gimenez, Colin Gjervold, Nancy Glickman, Marcello Gomes, Steve Goodman, Ted Goodman, Carl Goodrich, Dave Goodwin, Frank Goodwin, Caleb Gordon, Tom Green, Jon Greenlaw, Rick Greenspun, Larry Gridley, Cheryl Ann Griffin, Gary Griffin, Jason Guerard, Jack Hailman, Erik Haney, Al & Bev Hansen, Alex Harper, Joanne Harrington, Mitchell Harris, Randy Harrod, Dale Henderson, Irene Hernandez, Claire Herzog, Audrey Heupel, Monica Higgins, John Hill, David Hilquist, John Hintermister, Chris Hooker, Brian Hope, Earl Horn, Alice Horst, Merle Hubbard, Paul Hueber, Marshall Iliff, Patrick James, Debbie & Greg Jones, Wally Jones, Tim Kalbach, Tammy Karr, Adam & Gina Kent, John Killian, Barry Kinzie, Jim Kittinger, Nancy Klein, Carolyn Kline, Sheila Klink, Andrew Knafel, Joseph Knoll, Marianne Korosy, Andy Kratter, Jerry Krummrich, Ed Kwater, Keith Laakkonen, Bill & Nancy LaFramboise, Shirley Lasseter, Patrick Leary, Felicia Lee, Cathy Levreault, Jan Lloyd, Darcy Love, Mike Manetz, John Mangold, Steve Mann, Don Margeson, Rita Mask, Tom Mast, Lin & Omega Marvil, Eva Matthews, Peter May, Jonathan Mays, Al Menk, Lenore McCullagh, Stephen McCullers, Greg McDermott, Vince McGrath, Jim McKay, Powers McLeod, Mike McMillian, Shelby McNemar, Larry McQueen, David McRee, Don Miller, Justin Miller, Joe Misiaszek, Trey Mitchell, Roy Morris, Alan Moss, Tina Mossbarger, Cathy Murphy, John Murphy, Heather Nagy, Kris Nelson, Roger Newell, Tom Obrock, Earl Orf, Stephen Ossmer, Jose Padilla, Ruth Parks, Al Pelligrinelli, Steve Petruniak, Eric Plage, Valeri Ponzio, Matt Pooling, Bill Pranty, Nancy Price, Donald Pridgen, David Pugsley, Bruce Purdy, Brian Rapoza, Chris Rasmussen, Diane Reed, Bob Repenning, Bryant Roberts, Ellen Robertson, Harry Robinson, Ron Robinson, Tom Rodriguez, Jean Rolke, Charlotte Roman, Barry Rossheim, Al Roush, Rex Rowan, Lesley Royce, Vada

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Spring 2012 report not report previously: White-crowned Sparrow: 1 adult *gambelii* at Everglades NP (*Miami-Dade* or *Monroe*) 25 Apr (David Schaffter).

Report prepared by **Bill Pranty**, state compiler (8515 Village Mill Row, Bayonet Point, Florida 34667-2662, <billpranty@hotmail.com>). Regional compilers are **Brian Ahern**, 629 Gail Avenue, Temple Terrace, Florida 33617, <brianahern@aol.com>, **Bruce H. Anderson** (2917 Scarlet Road, Winter Park, Florida 32792, <scizortail@aol.com>), **John H. Boyd III** (15291 SW 108th Terrace, Miami, Florida 33196, <boydj@fiu.edu>), **Kevin Dailey** (6661 Beatrix Street, Jacksonville, Florida 32226, <kedailey@yahoo.com>), **Bob and Lucy Duncan** (614 Fairpoint Drive, Gulf Breeze, Florida 32561, <Town_Point@bellsouth.net>), **Charlie Ewell** (115 SW 51st Terrace, Cape Coral, Florida 33991, <anhinga42@comcast.net>), **Bev Hansen** (6573 Pine Meadows Drive, Spring Hill, Florida 34606, <bevalhansen@earthlink.net>), **Paul Miller** (Kissimmee Prairie Preserve State Park, 33104 NW 192nd Avenue, Okeechobee, Florida 34972, <bikerbirder@gmail.com>), and **John Murphy** (766 Alligator Drive, Alligator Point, Florida 32346, <southmoonunder@mchsi.com>).

FLORIDA ORNITHOLOGICAL SOCIETY, INC.
TREASURER'S REPORT - 2012

Account balances as of December 31, 2012:

Account	Balance
Fidelity Account	\$148,589.23
PayPal Account	\$376.16
Total Assets	\$148,965.39

Fund balances as of December 31, 2012:

Fund	Balance
General Operating Fund	\$29,524.62
Special Publications Fund	\$31,873.13
Cruickshank Fund	\$37,407.35
Robertson Fund	\$15,541.78
Endowment Fund	\$24,463.85
Friends of FFN	-\$270.47
Life Membership Fund	\$9,017.81
Deferred Items (2013 Dues)	\$1,407.33
Total Assets	\$148,965.39

2012 Income and Expenses:

Income	Amount	Expenses	Amount
Annual Membership Dues	\$9,120.20	FFN Printing	\$7,983.50
Life Membership Dues	\$0.00	FFN Color Printing	\$700.00
Interest/Asset Change in Value	\$18,302.71	Postage & Shipping	\$787.73
Page Charges	\$225.00	Operating Expenses	\$892.23
Meetings 2011	\$9,927.00	Meetings 2012	\$8,047.32
Special Publication Sales	\$14.98	Records Committee	\$735.92
Back Issue Sales	\$0.00	Cruickshank Award	\$2,038.14
Operating Income	\$4.38	Robertson Award	\$0.00
Gifts General Operating Fund	\$751.00	Golden Swallow Project	\$0.00
Gifts Cruickshank Fund	\$45.00	Space Coast Festival-FOS table	\$160.00
Gifts Robertson Fund	\$120.00		
Gifts Endowment Fund	\$100.00		
Gifts Friends of FFN	\$515.00		
Gifts Golden Swallow Project	\$0.00		
Total	\$39,125.27	Total	\$21,344.84

Change in Total Assets:

Totals	Balance
Total Assets December 31, 2011	\$131,184.96
Total Income 2012	\$39,125.27
Total Expenses 2012	-\$21,344.84
Total Assets December 31, 2012	\$148,965.39

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